



Prickly Lettuce

Lactuca serriola

OTHER NAMES — wild lettuce, milk thistle.

Prickly lettuce is an annual or winter annual, reproducing by seed. It is found in waste places, cultivated fields, meadows, pastures, gardens and roadsides. The entire plant contains a sticky milky juice. The young plant is eaten readily by livestock.

Prickly lettuce grows 2 to 7 feet high. The stems are stout, leafy, branched near the top, smooth with a few prickles or spines. The leaves

are alternate, oblong, with spines on the underside of the middle vein and on the outer edge. The leaves are irregularly shaped with wavy margins and the base encircles the stem. The flowers are yellow and produced in small heads. Seeds are smooth, gray to brown, oblong, flat, and tipped with a beak. The surface of the seed is covered with thin lines running lengthwise with the seed.

Source: South Dakota Weeds

FACU, DRA

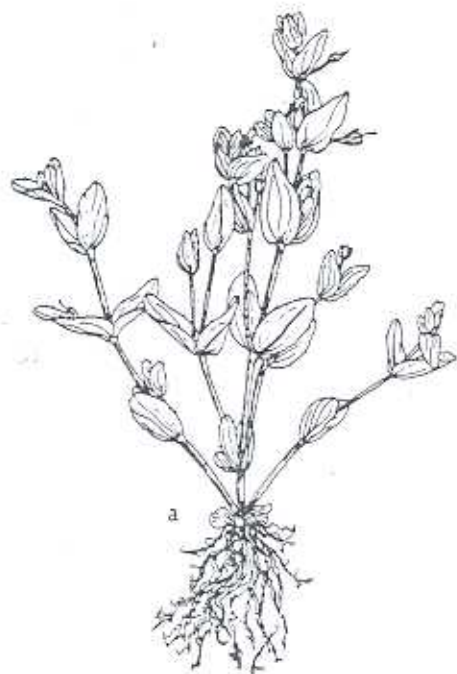


Fig. 688: a, *Lindernia dubia*: a, habit, x $\frac{1}{2}$.

Lindernia dubia (L.) Penn. Fig. 688.

Plant glabrous, the simple or much-branched stems erect-ascending, to 35 cm. high; leaves narrowly elliptic to oblong or obovate, to 3 cm. long, the lower ones narrowed but the upper ones rounded and clasping at base, entire to remotely dentate; pedicels 5–12 mm. long, stoutish; calyx lobes linear; corolla 7–10 mm. long, those of the later flowers mostly falling unopened; style 2.5–3.5 mm. long; capsule obliquely ellipsoid, about 4 mm. long. Incl. subsp. *major* Penn., *Ilysanthes gratioloides* (L.) DC., *I. dubia* (L.) Barnh.

False or moistbank pimpernel

Source: Correll and Correll, 1972

OBL, DRA

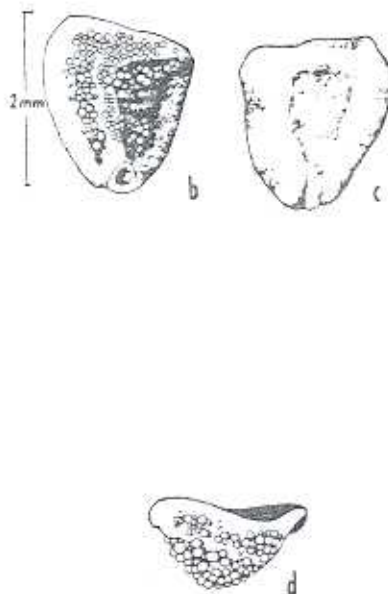
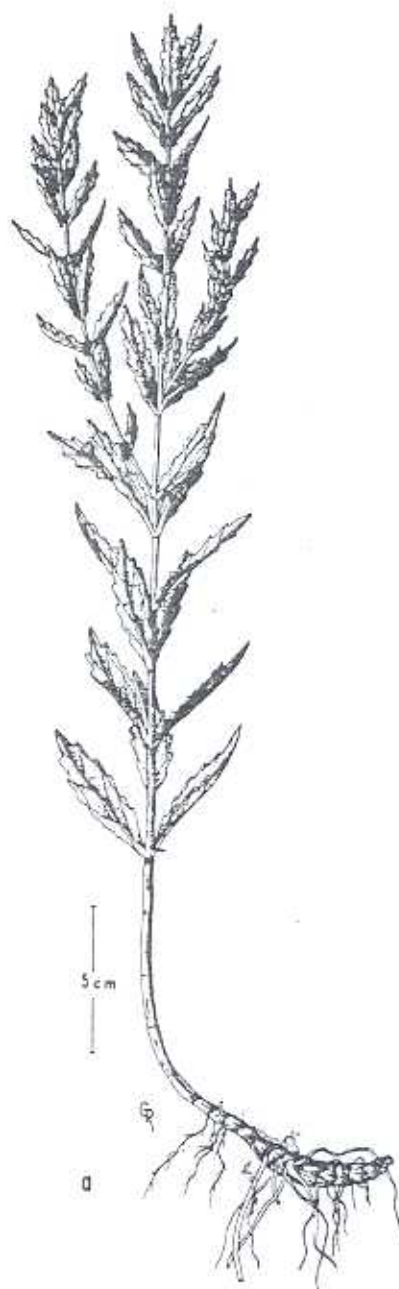


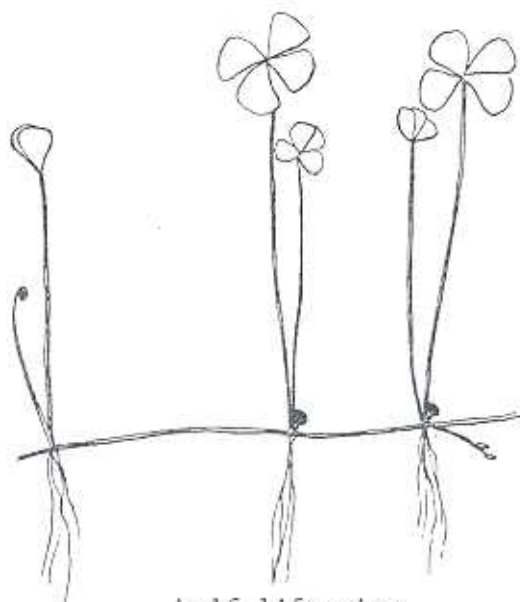
Fig. 673: *Lycopus asper*: a, habit; b, inner surface of the nutlet; c, outer surface of the nutlet; d, upper surface of nutlet. (Courtesy of R. K. Godfrey).

Western waterhorehound
Rough bugleweed

Source: Correll and Correll

OBL





half life-size

MARSILEAS, Marsilea

Fresh water; British Columbia to Massachusetts, California, and Louisiana (but commonest in the West).

Leaves are composed of four leaflets. They float, stand above water, or grow where there is no water.

The five kinds known in Canada and the United States are described in Fernald's and Mason's manuals and in John Kunkel Small's "Flora of the Southeastern United States" (1913) as *Marsilea macropoda*, *mucronata*, *quadrifolia*, *tenuifolia*, and *uncinata*. *Mucronata*, by far the commonest, grows in southwestern Canada and the western half of the United States. *Quadrifolia*, a native of Europe, has run wild in a few places in the northeastern quarter of the United States. The others have been found only in Texas and neighboring states.

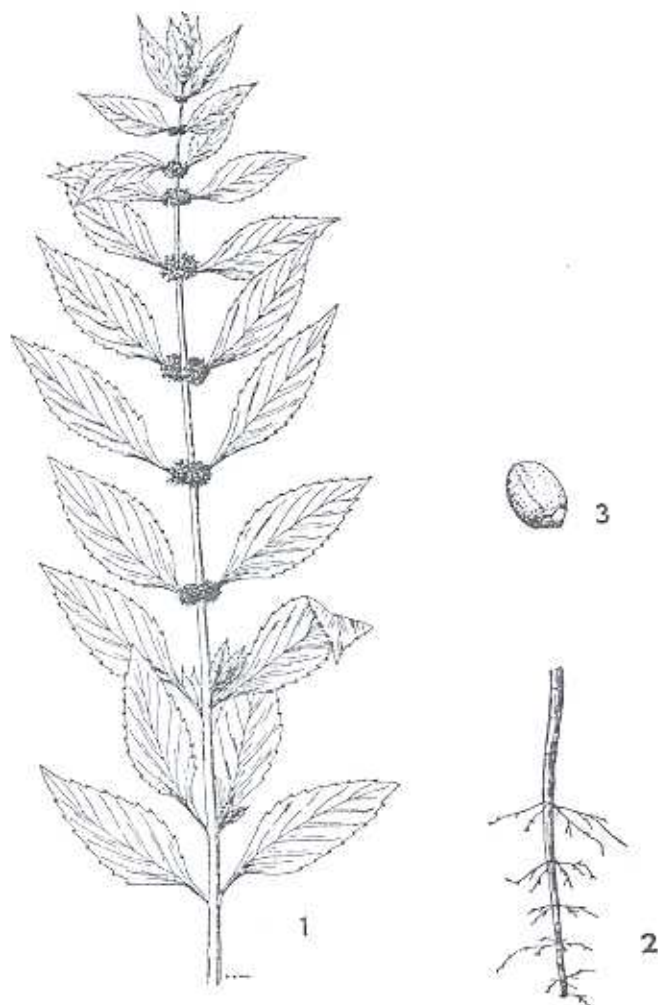
Tenuifolia has very narrow leaflets. The others have wide leaflets, similar to those pictured of *mucronata*. They can be told apart when they are bearing little bean-shaped sporocarps close to the base of leaf stalks.

Waterfern or hairy pepperwort

Source: Hotchkiss, 1967

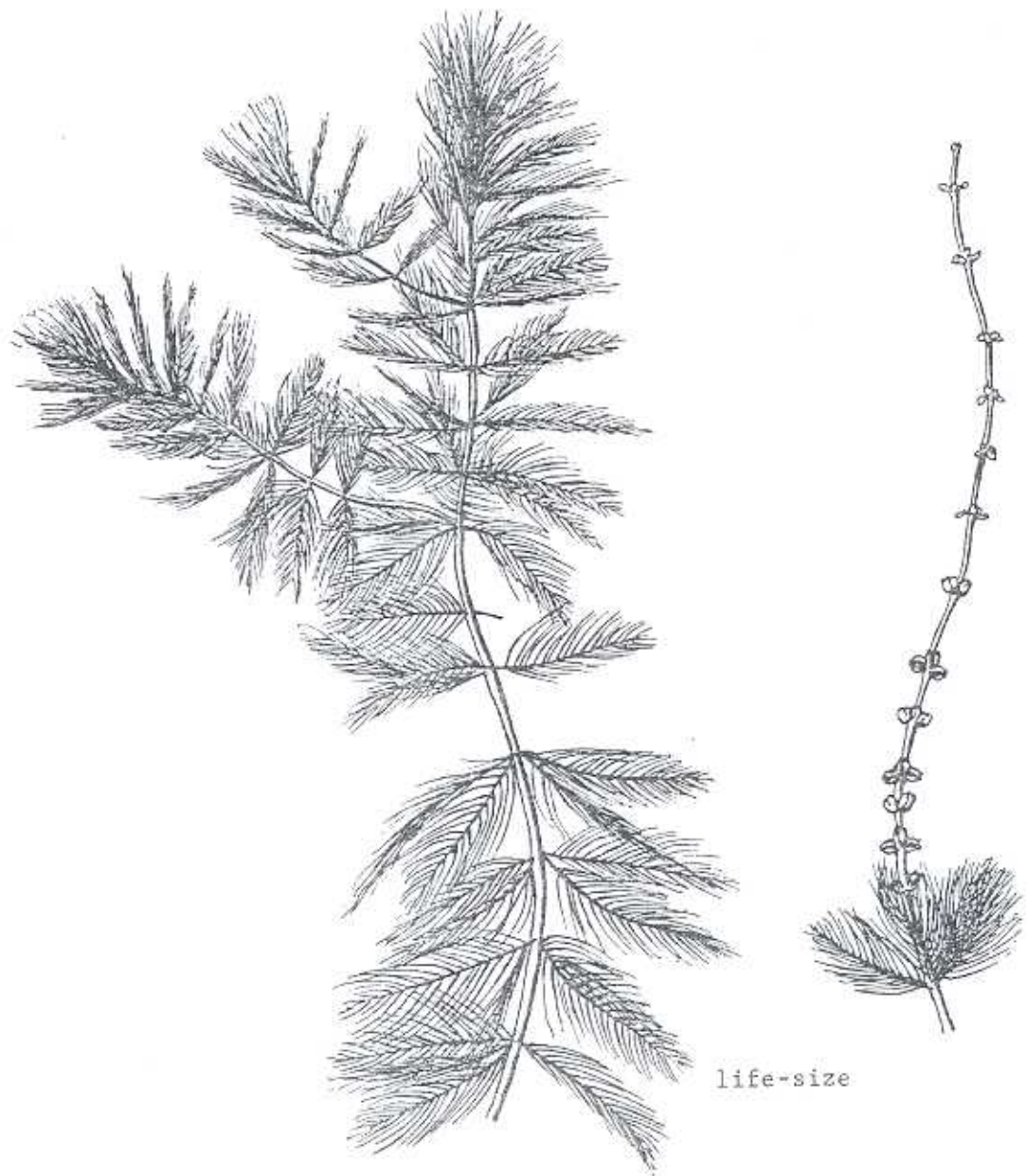
OBL

MINT FAMILY, Labiatae



FIELD MINT, *Mentha arvensis* L. 1, upper part of plant; 2, lower part of plant; 3, seed. **Perennial**, reproducing by seeds and rhizomes, aromatic. **Stems** square, usually branching, up to 2½ feet (75 cm) tall; barbed hairs on angles and sometimes on sides of stem. **Leaves** opposite, with petioles, strongly scented, pinnately veined, narrow to oval, with small teeth on margins and with minute glandular hairs on leaf surface. **Flowers** clustered in axils of upper leaves. Petals pink, lavender, or occasionally white; ¼ to ½ inch (3 to 6 mm) long, with 5 teeth and prominent nerves in the tube. **Fruits** are nutlets less than 1/16 inch (1.5 mm) long, smooth, light brown, each with an irregular dark line on the convex side. **Found** in meadows, in pastures, along ditches and shores, mostly on damp, open gravel.

Source: Weeds of the North Central States
FACW



EURASIAN WATERMILFOIL, *Myriophyllum spicatum*

Fresh inland water and fresh to brackish coastal water; California; and Wisconsin to Vermont, Texas, and Florida.

This plant has been in the United States for at least seventy years. Since 1955 it has become very abundant in Upper Chesapeake Bay, the tidal Potomac River, and several Tennessee Valley reservoirs.

Leaves look like weatherbeaten feathers because of their 12-16 pairs of close-together leaflets.

Resembles Northern (page 32) and Whorled (page 34) Watermilfoils, with which it sometimes grows; but can be told from them by its more featherlike leaves.

Source: Hotchkiss, 1967

OBL

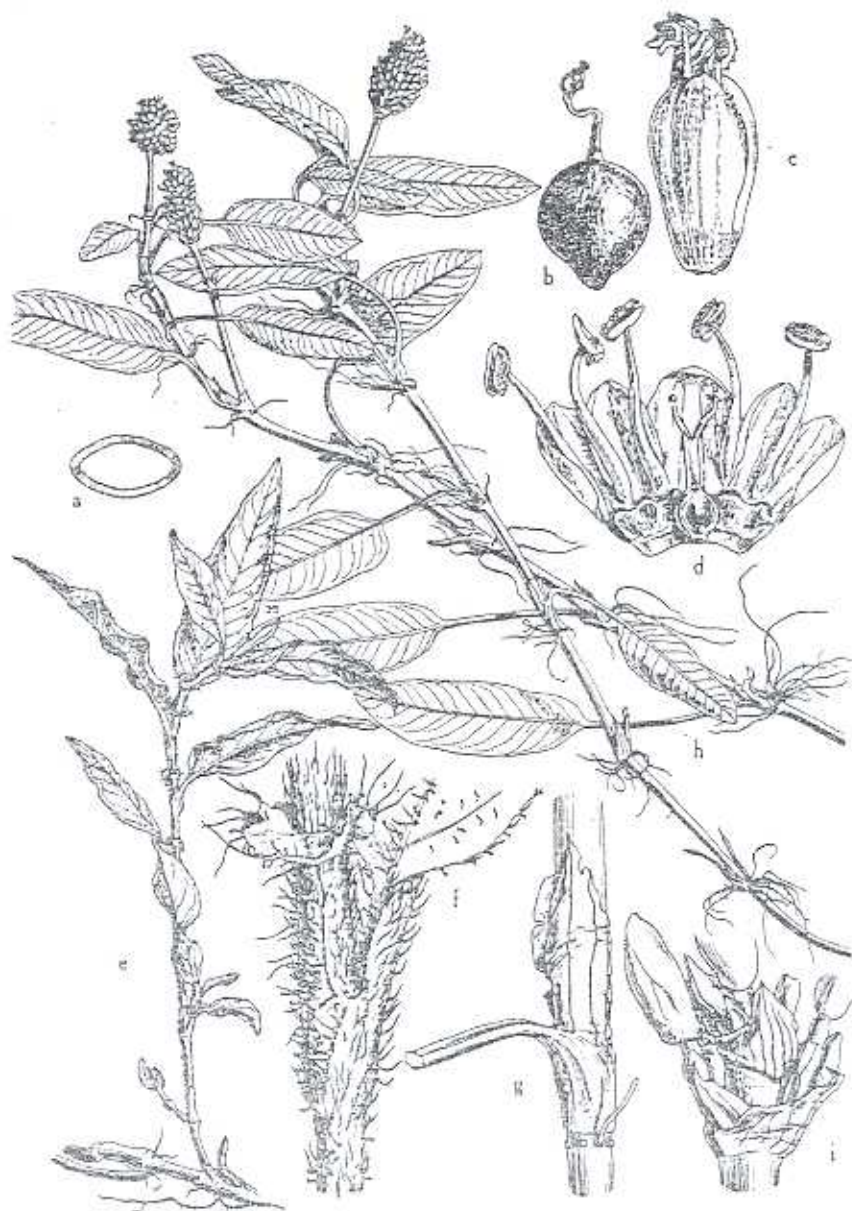


Fig. 408: *Polygonum amphibium*: a, achene (cross section), x 6; b, mature achene, x 6; c, flower, showing exerted stamens, x 6; d, perianth, spread open, showing the prominent glandular disk and the regularly inserted stout filaments, x 6; e, terrestrial plant, showing habit, scabrous pubescence, x 2; f, stipular sheath of terrestrial plant, scabrous, the broad margin ciliate, x 3; g, stipular sheath of aquatic plant, glabrous and membranous, x 2; h, habit of aquatic plant, showing the rooting nodes, the glabrous floating leaves and the short dense flowering spikes, x 2; i, lower part of spike, showing the bilobed sheathing bracts and the flowers on short glabrous pedicels, x 4. (From Mason, Fig. 199).

***Polygonum amphibium* L. FLOATING KNOTWEED, WATER SMARTWEED. Figs. 408 and 409.**

Dimorphic, amphibious, aquatic or terrestrial perennial, rooting at swollen nodes; terrestrial plants erect or decumbent, to about 15 dm. tall; aquatic plants with floating tips and spreading or floating leaves, or at length with erect branched aerial stems; stems at length swollen above the nodes, glabrous to puberulent or finely tomentose; leaves lanceolate-attenuate to oblong-elliptic or ovate, 5–25 cm. long, 1–6 cm. wide, obtuse to acuminate at apex, slightly unequal at the cuneate to truncate or cordate base, finely silky-pubescent, the margins somewhat undulate; petioles 2–4 cm. long, the lower half decurrent and flanked by a stipular sheath extending as a cylinder around the stem for 10–20 mm. above its junction with the petiole; stipular sheath about 12-nerved and truncate across the top, those of floating or submersed stems glabrous and entire, those of emerged stems scabrous and ciliate-margined, with a few hairs of unequal lengths along the

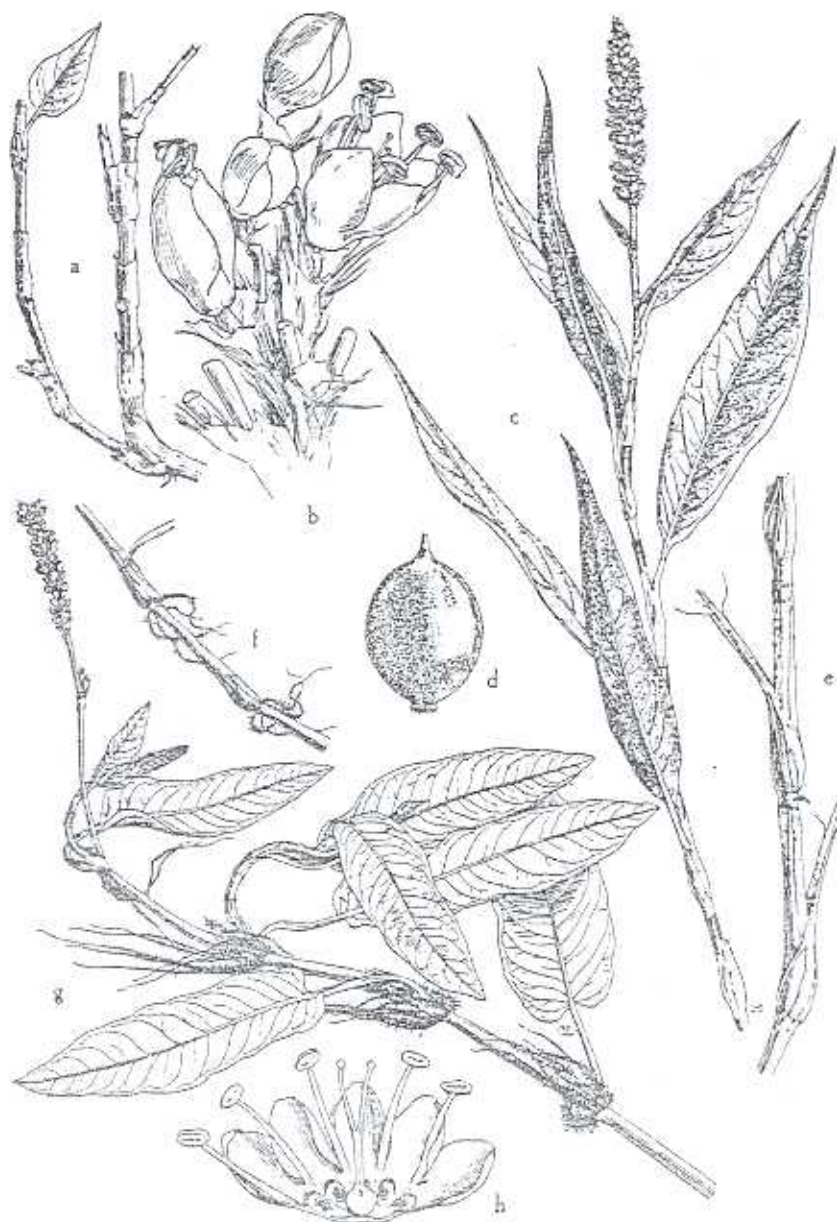
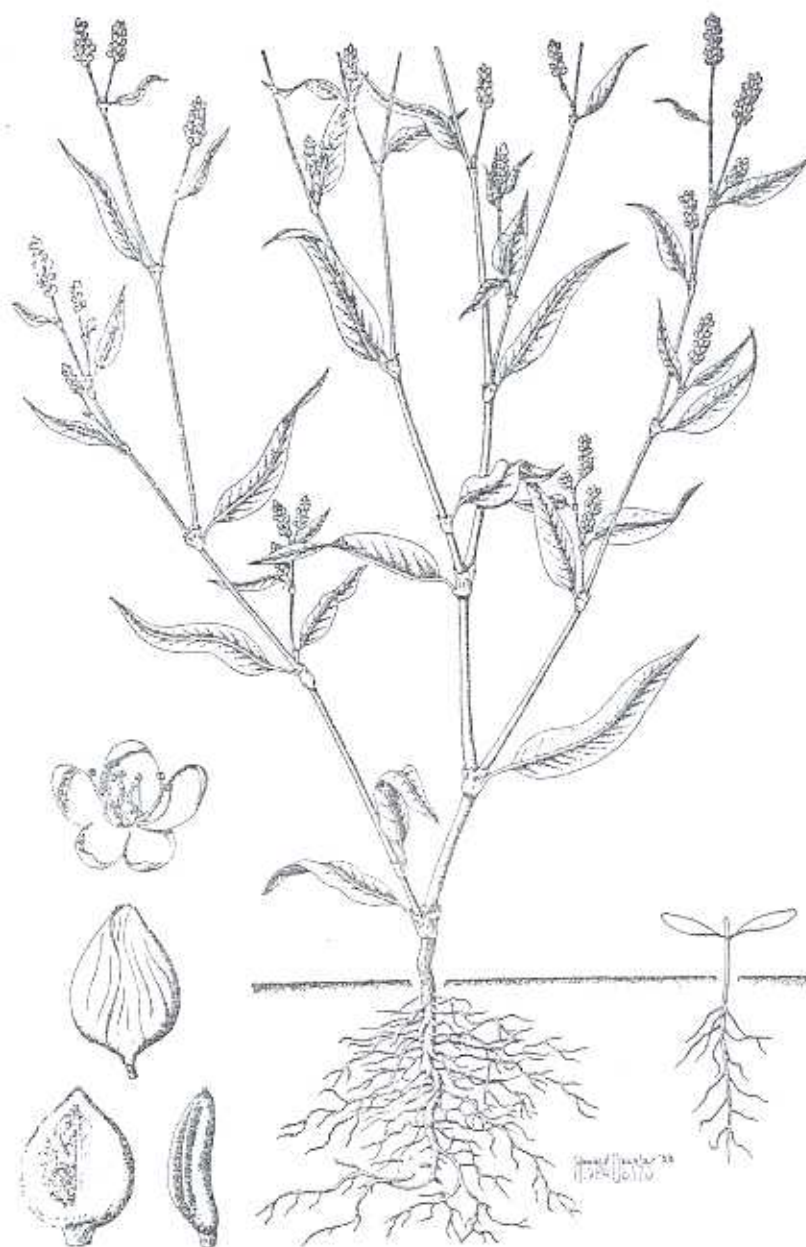


Fig. 409: *Polygonum amphibium*: a, stem of terrestrial plant, the mature branch glabrous, the young branch puberulent, $\times \frac{2}{3}$; b, part of flowering spike, showing the short-pediceled fasciculate flowers in axils of hairy sheathing bracts, $\times 4$; c, habit, terrestrial plant, pubescent, $\times \frac{2}{3}$; d, mature achene, $\times 6$; e, stipular leaf sheaths, terrestrial plant, $\times \frac{2}{3}$; f, lower part of stem, aquatic form, showing roots at the swollen nodes, $\times \frac{2}{3}$; g, habit aquatic plant, glabrous, $\times \frac{2}{3}$; h, flower, spread open to show the conspicuous glandular disk and regular stamen insertion, $\times 4$. (From Mason, Fig. 198).

nerves or scattered between them; inflorescence of 1 or 2 elongate densely flowered terminal spikes 1–8 cm. long on a stout red densely glandular-pubescent peduncle 1–3 cm. long; flowers fascicled in the axils of hairy stipulate bracts on short glabrous pedicels, 1 flower of each fascicle blooming at a time, the flowers thus blooming in succession over entire spike; perianth 5-merous, petaloid, bright rose-pink, 4–5 mm. long, the ovate lobes free above but united below; stamens 5, inserted just below the sinuses of the perianth lobes, included or exserted (always of different length than the style); anthers versatile; glandular disk attached to the base of the perianth tube, orange-red, 5-lobed, the tips of lobes free; ovary flattened; styles elongate, bifid to about or below the middle, included or exserted; stigmas capitate; achene lenticular, 2.8–4 mm. long, beaked with the persistent style base, blackish to deep reddish-brown, shiny, minutely punctate. *P. natans* Eat., *P. coccineum* Muhl., *Persicaria coccinea* (Muhl.) Greene, *P. Muhlbergii* (Meisn.) Small.

Source: Correll and Correll, 1972

OBL



Pale Smartweed

Polygonum lapathifolium

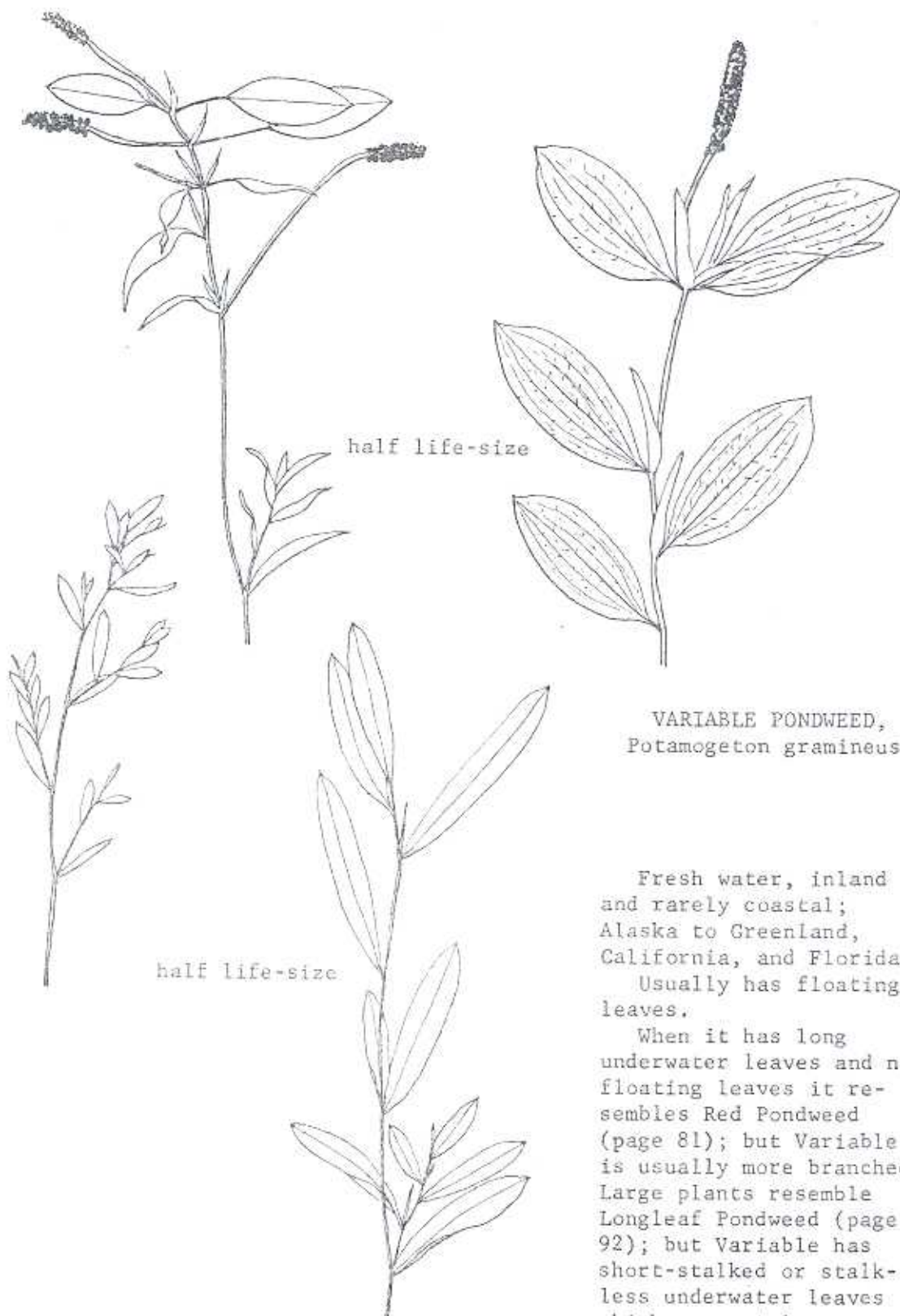
Nodding smartweed
Willow weed

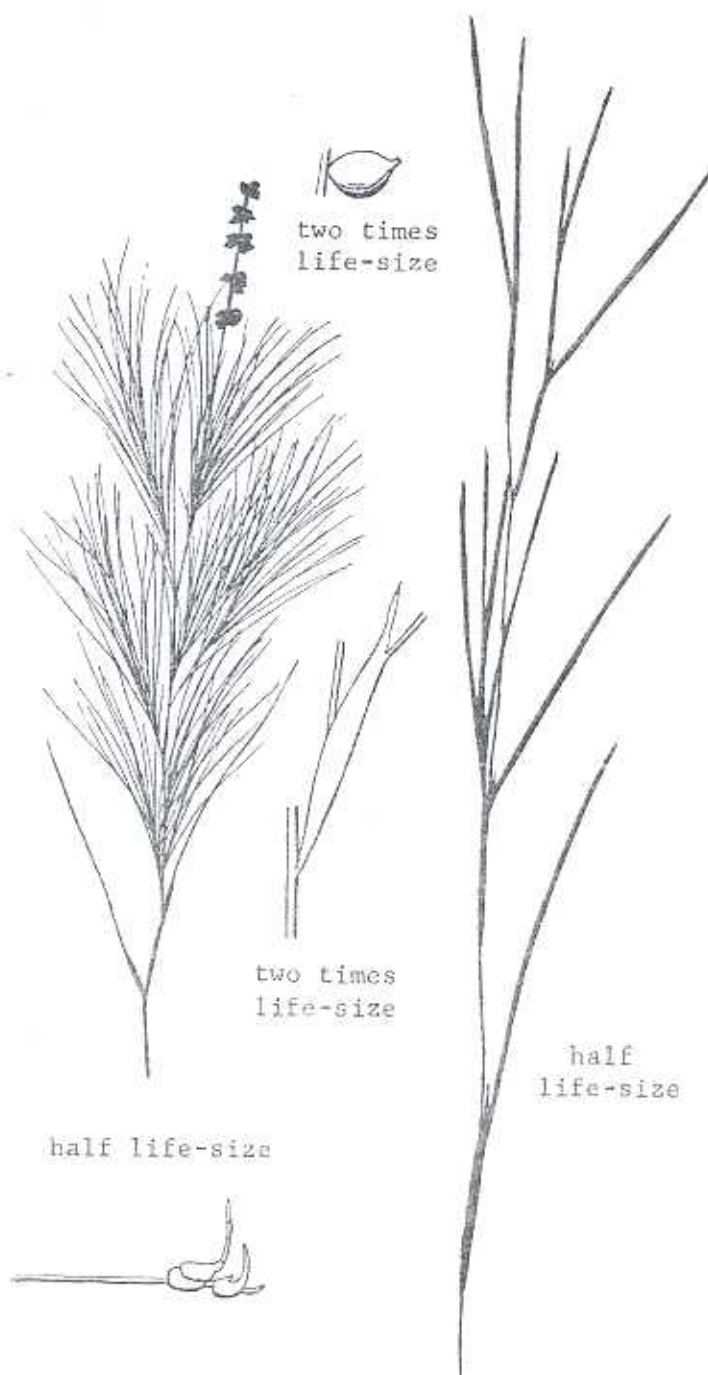
OTHER NAMES — annual smartweed, purple head, heartease.

Pale smartweed is an annual, reproducing by seed. It is found in ditches, fields, gardens and waste places. Small grain, flax, and legume seeds are often contaminated with the seed of pale smartweed.

The plant is somewhat bushy and grows 2 to 5 feet high. The stems are smooth and branched

from the joints or nodes. The smooth leaves are pointed, alternate, 2 to 8 inches long, and have a sheath at the base that extends around the stem. The flowers are pale pink or white, five-parted, and arranged in a short spike. The seeds are smooth, flattened, almost circular, and have a shiny black color.





SAGO PONDWEED,
Potamogeton pectinatus

Fresh and alkali inland water and fresh to brackish coastal water; Alaska to Quebec, California, and Florida (but rare in the southeastern states).

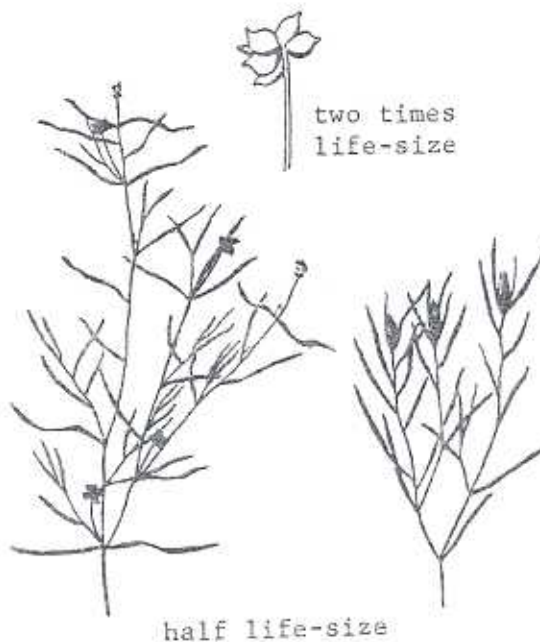
Resembles Thread-leaf Pondweed (page 71); but the stems are usually longer, and the larger seeds (1/8 inch long or more) have a pointed tip. Resembles Big-sheath Pondweed (page 74); but all the leaves have narrow-sheathed bases, and the seeds have a pointed tip. When not in bloom or seed, resembles non-seeding Widgeongrass (page 73); but the leaves are usually in bushier clusters, the sheathing base of the leaves has a tapering, flimsy tip, and the rootstocks are long and straight and often have tubers.

SLENDER PONDWEED,
Potamogeton pusillus

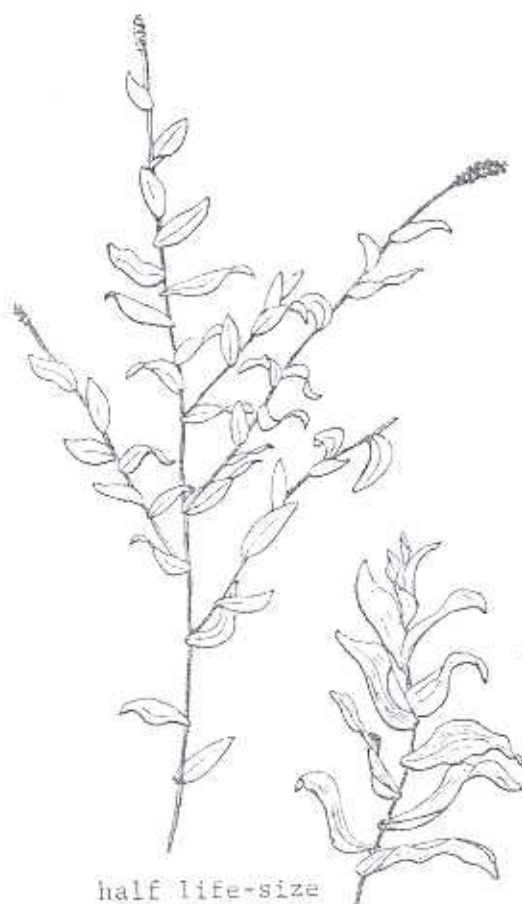
Fresh and alkali inland water and fresh and slightly brackish coastal water; Alaska to Greenland, California, and Florida.

Resembles Leafy Pondweed (page 77); but has longer-stalked seed heads and blunt-backed seeds. Resembles Fries Pondweed (below); but has smaller seeds (a little more than 1/16 inch long) usually smaller leaves, and smaller, smooth-leaved winterbuds. Resembles the underwater form of Snailseed Pondweed (page 78); but has longer-stalked seed heads, convex-sided seeds, and leaves with non-sheathing base. Resembles the underwater form of Vasey Pondweed (page 80); but has bigger, fatter winterbuds.

Source: Hotchkiss, 1967



OBL



REDHEAD-GRASS,
Potamogeton richardsonii

Fresh inland water; Alaska to Newfoundland, California, Arizona, Nebraska, and New Jersey. And fresh to brackish coastal water; Newfoundland to Texas (but rare south of North Carolina).

Leaves vary from oval and flat to lance-shaped and puckered.

Long-leaved plants resemble Whitestem Pondweed (page 83); but the leaves have a flat tip, the upper part of stems is usually straight, the seed heads are short-stalked, and the blunt-backed seeds are about 1/8 inch long.

Source: Hotchkiss, 1967

081

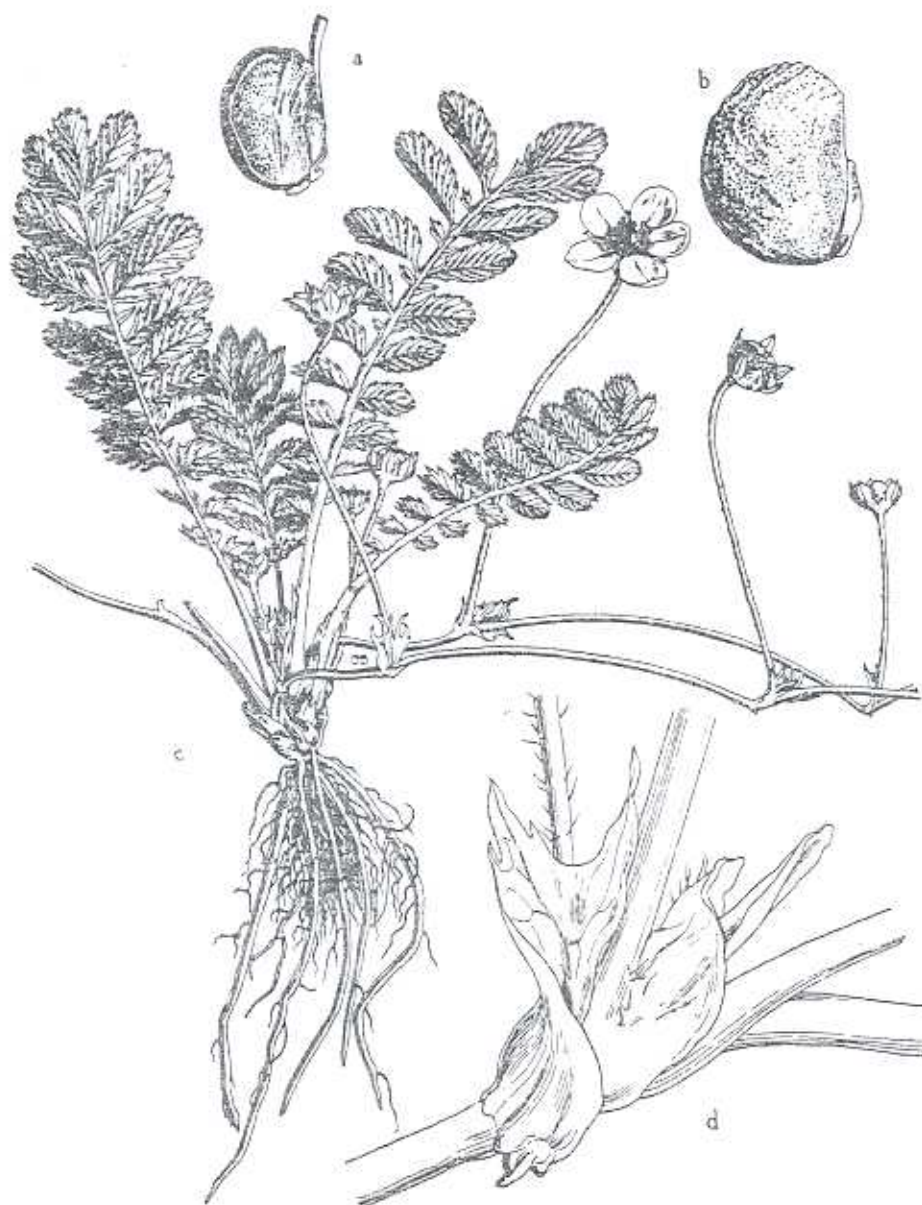


Fig. 495: *Potentilla Anserina*: a, young achene, showing basal part of style, x 12; b, mature achene, x 12; c, habit, x $\frac{2}{3}$; d, stipules, x 4. (From Mason, Fig. 252).

Source: Correll and Correll, 1972

OBL



Rough Cinquefoil

Potentilla norvegica

OTHER NAMES — strawberry weed, five finger.

Rough cinquefoil is an annual, reproducing by seed. It is found in pastures, meadows, waste places and roadsides.

Rough cinquefoil grows 6 inches to 2½ feet high. The stems are branched, rough, hairy and stout. The leaves are alternate, divided into three leaflets that turn reddish-green in the fall. Each

leaflet is 1 to 2 inches long, has toothed margins, and is covered with rough hair. The flowers are yellow and resemble strawberry blossoms. The seeds are produced in a cup-shaped container. They are very small, somewhat kidney-shaped, have a wrinkled surface and are light brown in color.

Source: South Dakota Weeds

FAC

Glabrous or sparingly hirsute palustrine perennial; scapes erect, to 3 dm. high, branched or unbranched, with filiform stolons several dm. long, not fistulous; basal leaves with petioles 2-5 cm. long, simple, ovate or reniform to trapezoidal or rectangular, to 35 mm. long and 2 cm. broad, crenate to dentate or sometimes merely 3-toothed or -lobed at the rounded to truncate apices, cordate to rounded or truncate at base, the stipular leaf bases 2-9 mm. long; pedicels 1-3 cm. long in flower and 2-6 cm. long in fruit, usually pubescent; sepals 5, greenish-yellow, spreading, elliptic, 2-5 mm. long, 1.5-3 mm. broad, glabrous, thick, promptly deciduous; petals 5 or up to 12, bright-yellow, narrowly obovate, 2-8 mm. long, 2-3 mm. broad; nectary scale over-arching the nectary, truncate, the margins free from the blade of the petal; stamens 10 to 30; achenes as many as 300 (usually much fewer) in a cylindroid head 3-13 mm. long and 3-6 mm. in diameter, cuneate-oblong, thin-walled, 1.5-2.3 mm. long, each face with about 4 longitudinal striations or branched nerves, glabrous, the margins noticeable, the triangular beak about 0.3 mm. long and not curved; receptacle cylindroid, 2-3 mm. long in flower, 4-7 mm. long in fruit, hairy.

Seaside buttercup
Seaside crowfoot

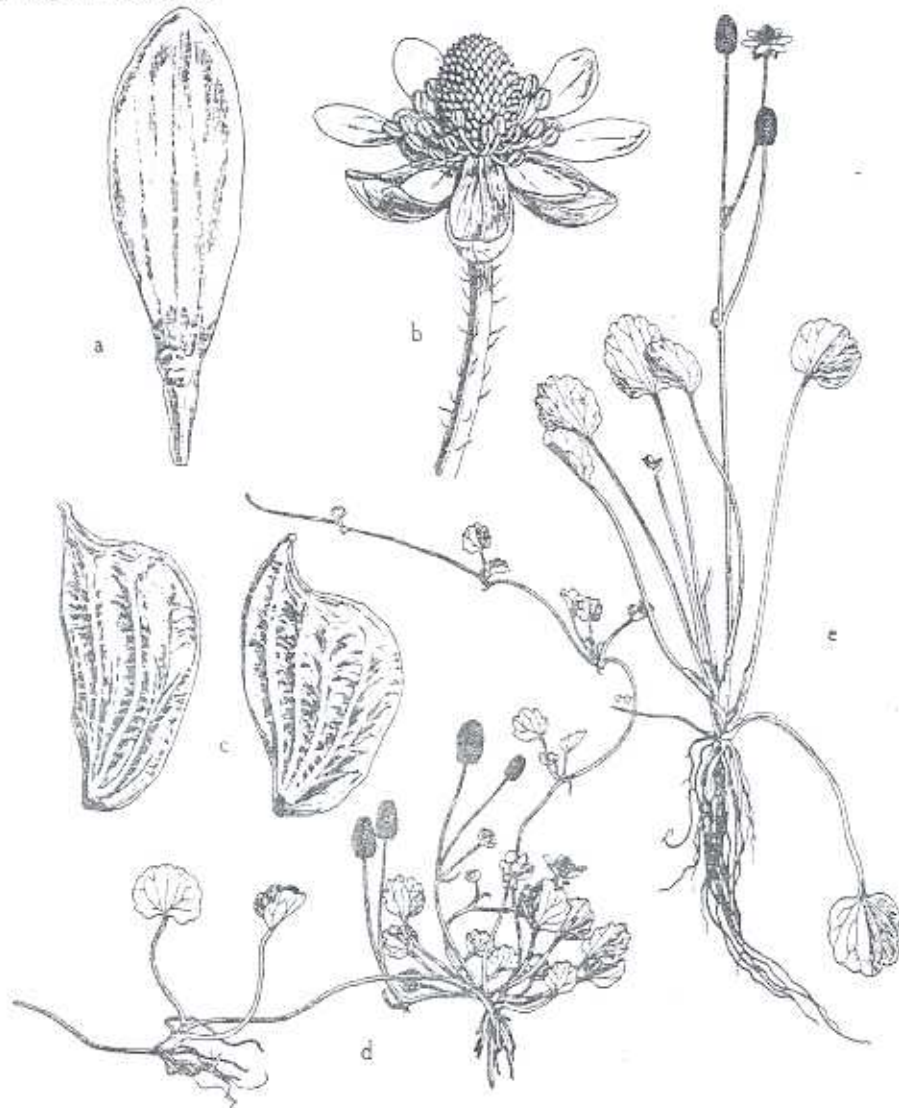


Fig. 464: *Ranunculus Cymbalaria* var. *saximontanus*: a, petal, gland covered by scale, x 12; b, flower, the petals shorter than the sepals, x 4; c, mature achenes, showing variation in shape, x 20; d and e, variations in habit, x $\frac{2}{3}$. (From Mason, Fig. 242).

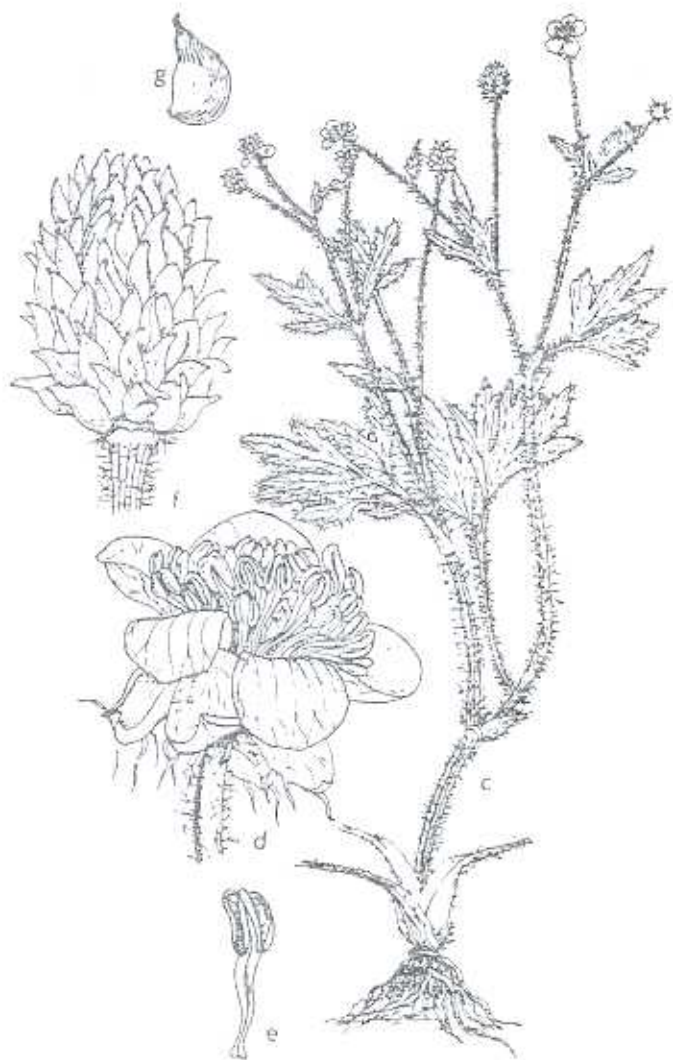
Source: Correll and Correll, 1972 OBL

Ranunculus Macounii Britt. Fig. 456.

Hirsute or glabrous annual or perennial; roots 1.5–2 mm. thick; stem reclining (at least below) or prostrate to suberect, often rooting at least at the lower nodes, 2.5–9 dm. long; branching, densely hirsute or hispid, or glabrous; petioles 5–20 cm long, densely hirsute to glabrous, the stipular leaf bases 1–3 cm. long; basal leaf blades simple or pinnately compound, deltoid in outline, 3–8 cm. long, 5–13 cm. wide, divided into 3 divisions or pinnate with 3 or 5 leaflets 3-parted and the parts again lobed, pubescent to glabrous; cauline leaves alternate, all but the uppermost similar to the basal and petioled; pedicels 1–8 cm. long in flower, 3–10 cm. long in fruit, usually appressed-hispidulous; sepals 5, yellowish, often purple-tinged, reflexed almost their whole length, ovate-triangular, 4–6 (–7) mm. long, 2.5–4 mm. wide, glabrous to pilose, promptly deciduous; petals 5, yellow, obovate, 3–5 (–7.5) mm. long, 2.5–3.5 (–6.5) mm. wide; nectary scale glabrous, free for most of its length, truncate; stamens 15 to 35; achenes 20 or 30 to 50 in an ovoid-cylindroid head 7–12 mm. long and 5–7 mm. in diameter, obovate with an acute base, 2–3 mm. long, smooth, glabrous, the margin conspicuously bevelled and narrowly keeled, the stout beak nearly deltoid and 1–1.2 mm. long, gradually curving or straight with a right angle bend at the tip; receptacle fusiform-cylindroid, 1–2 mm. long in flower, 4–5 mm. long in fruit, hispid.

Macouns buttercup

OBL



Ranunculus Macounii: c, habit, $\times \frac{1}{2}$; d, flower, $\times 3$; e, stamen, $\times 5$; f, fruit, $\times 3$; g, achene, $\times 5$. (V. F.).

Glabrous or rarely hirsute palustrine or rarely aquatic annual or short-lived perennial; stems erect, rarely rooting, to 1 m. long, profusely branching, fistulous, inflated; basal leaves with petioles rarely to 25 cm. long, simple, reniform, to 6 cm. long and 1 dm. broad, deeply 3-parted or -divided, the primary parts or divisions lobed to parted or divided, the ultimate lobes obtuse or rounded, the sinuses rounded, cordate at base, rounded at apex, the broad stipular leaf bases 5-10 mm. long; cauline leaves alternate, the bracts often oblanceolate and entire, sessile; pedicels to 2 cm. long in flower, 1-3 cm. long in fruit; sepals 5, greenish-yellow, spreading, ovate, 2-3 mm. long, 1.5-2 mm. broad, pilose or glabrous, persisting later than the corolla; petals 5, light-yellow, obovate, 2-5 mm. long, 1-3 mm. broad; nectary scale glabrous with the margins prolonged along the blade of the petal, sometimes 1 or both with a free flap at the tip or the scale often completely surrounding the nectary; stamens 10 to 25; achenes 40 to 300 in a cylindroid head 3-10 mm. long and 2-6 mm. in diameter, obovoid, 0.8-1 mm. long, often with minute irregular transverse ridges in the central unthickened portion of each face, the periphery of the pericarp at least somewhat corky-thickened, the surface often with ridges or a circle of "pin-prick" depressions at the inner margin of the thickened zone, glabrous, the marginal keel obscure, the style and the achene beak almost lacking, not recurved; receptacle obovoid or cylindroid, 1-2 mm. long in flower, 2.5-9 mm. long in fruit, pubescent or sometimes glabrous.

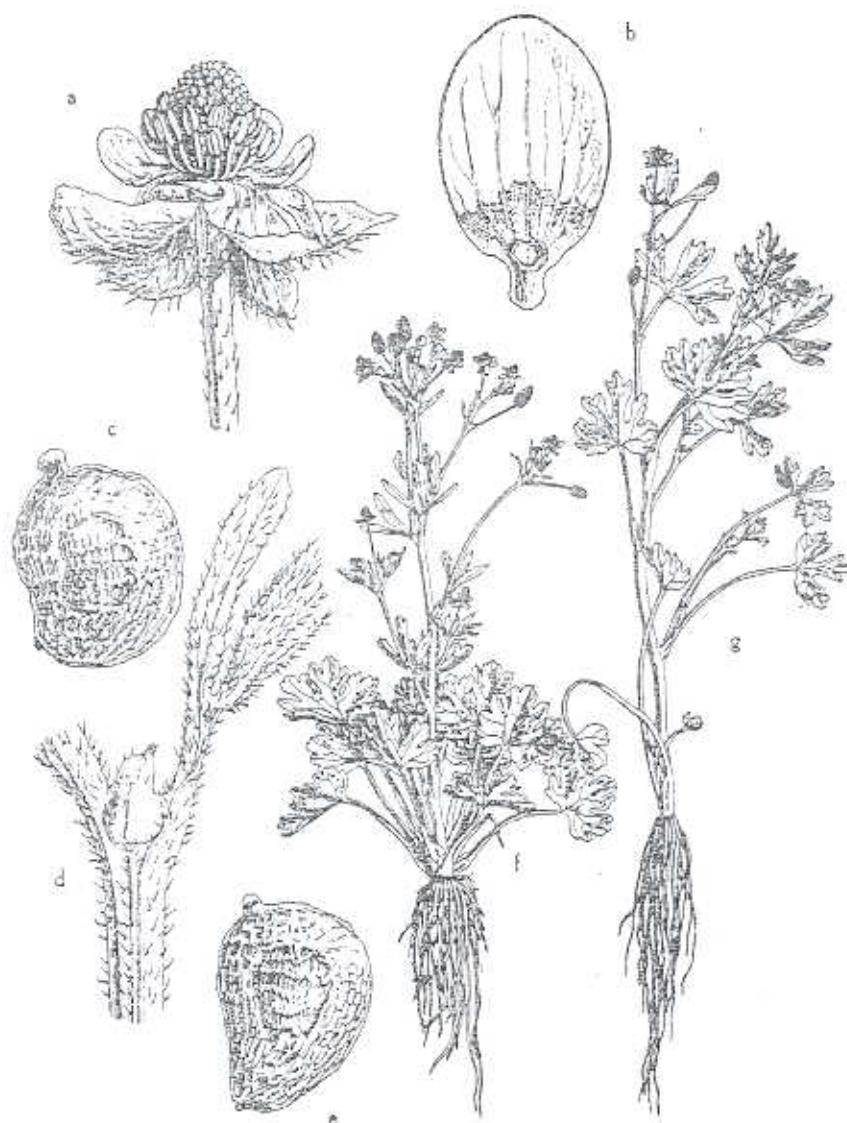
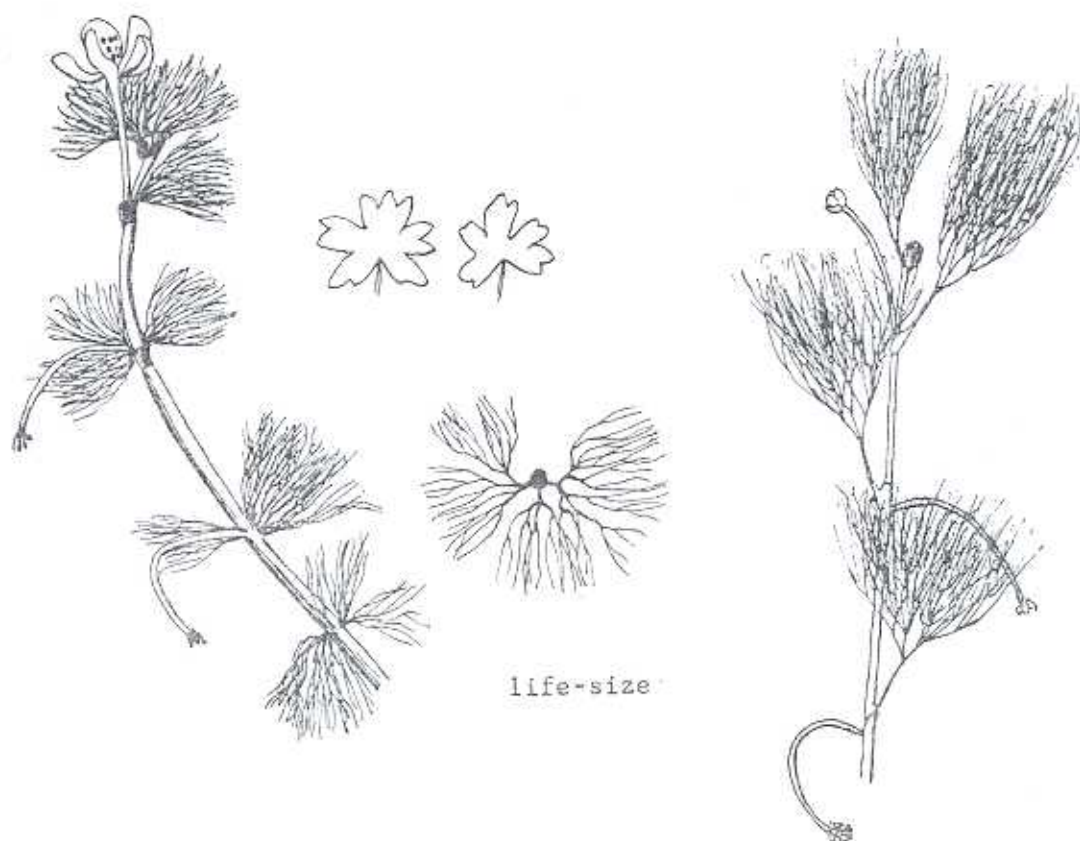


Fig. 463: *Ranunculus sceleratus*: a, flower, the hairy sepals reflexed, x 4; b, petal, showing the open nectariferous pit at the constricted base of the petal, x 20; c, mature achene, x 20; d, young upper leaf and auricle of sheath, x 4; e, variation in achene, x 20; f, habit, showing the cluster of basal leaves and the flowering and fruiting heads, x 20; g, habit variation, scarcely any basal leaves present, x 20. (From Mason, Fig. 238).



WHITE WATER BUTTERCUP, *Ranunculus trichophyllus*

Fresh water, often in slow streams; Alaska to Greenland, California, and Alabama (but rare in the southeastern states).

Stems usually just under water. Leaves firm to limp, stalkless to long-stalked; a single stalkless leaf sometimes looking like a cluster of several leaves. Sometimes stems have a few floating leaves. In summer, 5-petaled flowers often whiten a patch of water. Their stalks soon curve back into the water and are tipped with little balls of usually a dozen or more seeds. During low water in summer, patches of stems sometimes grow on mud.

Resembles Lobb Buttercup (page 113), which has mainly floating leaves, fewer seeds in a ball, and grows only from British Columbia to California.

Source: Hotchkiss, 1967

NC - OBL

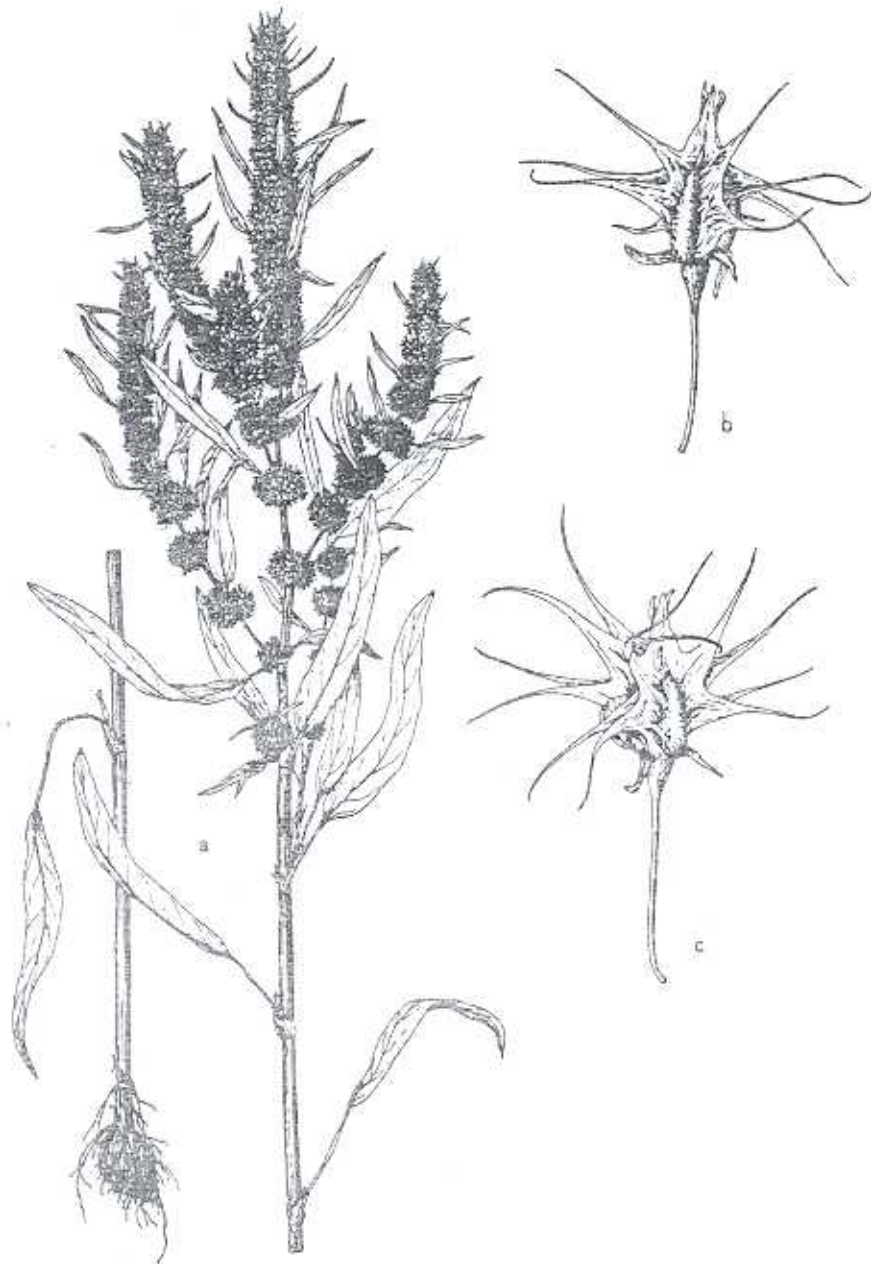
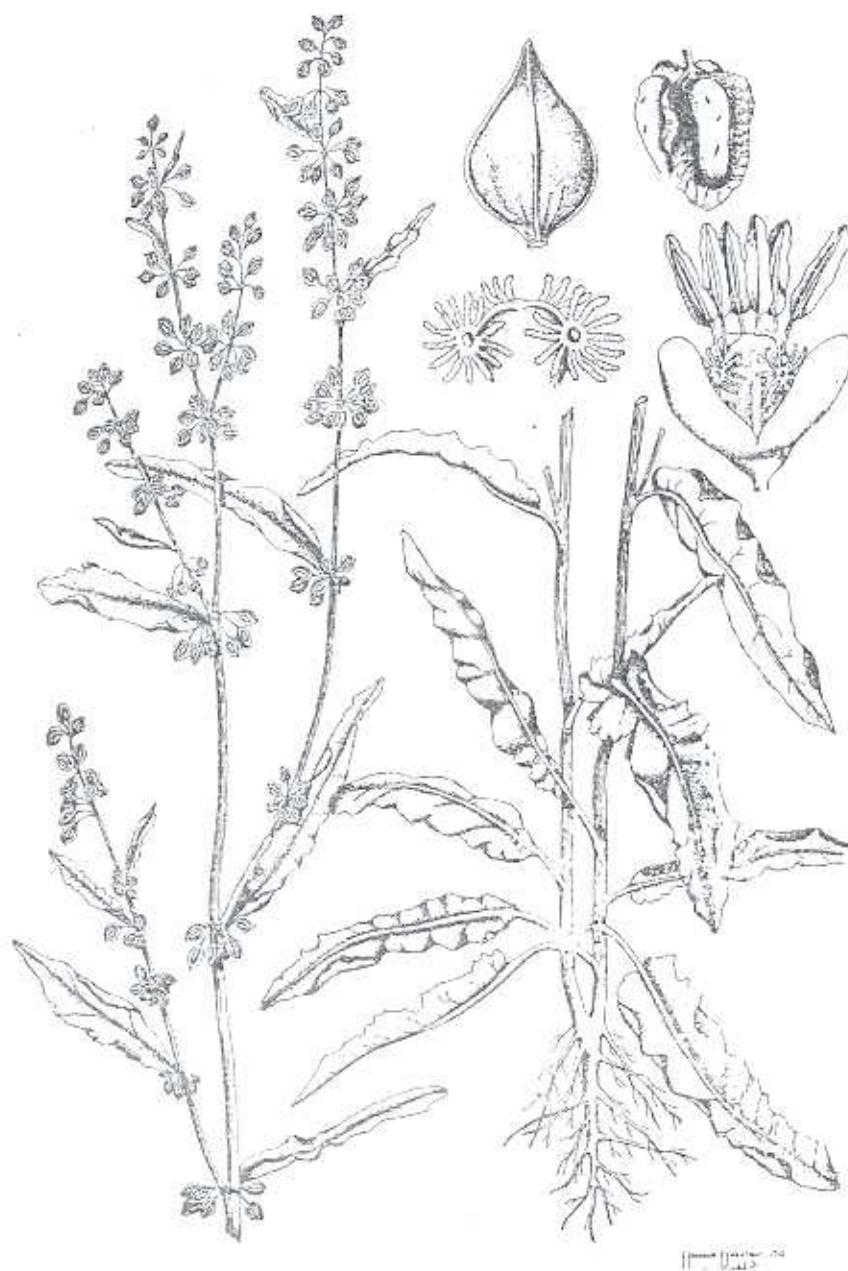


Fig. 402: *Rumex maritimus*: a, habit, x $\frac{1}{2}$; b and c, flowers in fruit, showing the inner perianth segments with slender teeth and long narrow callous grains, x 8. (From Mason, Fig. 212.).

***Rumex maritimus* L. GOLDEN DOCK. Fig. 402.**

Annual or occasionally biennial; stems erect or ascending, 1.5–6 dm. tall, usually strict, slender or stout, more or less striate, papillose-scabrous, glabrescent or glabrous, becoming brownish or sometimes purplish; lower leaves membranous or subcoriaceous, the margin more or less undulate-crested, glabrous and smooth or scabrous-pubescent, linear-lanceolate, the blade 5 to 7 times as long as wide, more or less cordate or truncate at base and widened above base, the apex acute; petiole shorter than blade; upper leaves progressively smaller, narrower; panicle broad, the glomerules many-flowered, contiguous and compact above, remote below and often extending to near base of plant, leafy-bracted; pedicels slender, articulate near base, 1 to 2 times as long as mature perianth; flowers perfect; valves triangular, 1.7–2 mm. long, 0.7–0.9 mm. wide exclusive of the teeth, subcoriaceous, the apex ligulate, acute, the margins each with 2 (or 3) divergent setaceous-subulate teeth, each valve with a callous grain, these fusiform, cellular-punctate, prominent, about 1–1.4 mm. long, 0.5–0.7 mm. wide, the apex obtuse, narrowing into midrib; achene brown, 1.3–1.4 mm. long, 0.5–0.7 mm. wide, the ends usually subequally acuminate. Incl. var. *fueginus* (Phil.) Dusén, *R. fueginus* Phil.

NR, DRA, FACW



Mexican Dock

Rumex mexicanus

OTHER NAMES — pale dock, willow leaved dock, smooth dock.

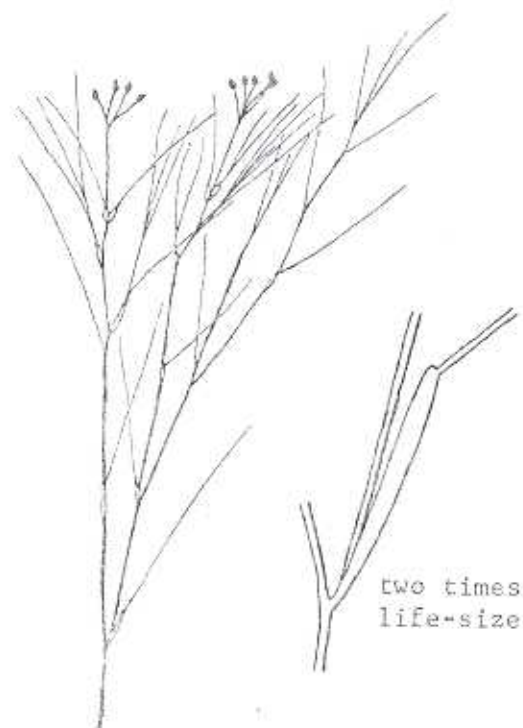
Mexican dock is a perennial, reproducing by seed. It is found in waste places, low moist areas, cultivated fields, pastures and meadows. The root is a thick, large taproot.

Mexican dock is a somewhat bushy plant, growing 1 to 3 feet high. The stems are grooved, smooth, branched and pale green. The leaves

are alternate, long, narrow, thick, tapering at both ends, and have smooth edges. The flowering head is produced in a raceme and the pale green flowers are arranged in dense clusters. The seeds are produced in a heart-shaped seed pod. They are tan, smooth, shiny, triangular and small.

Source: South Dakota Weeds

FACW



two times
life-size

half life-size

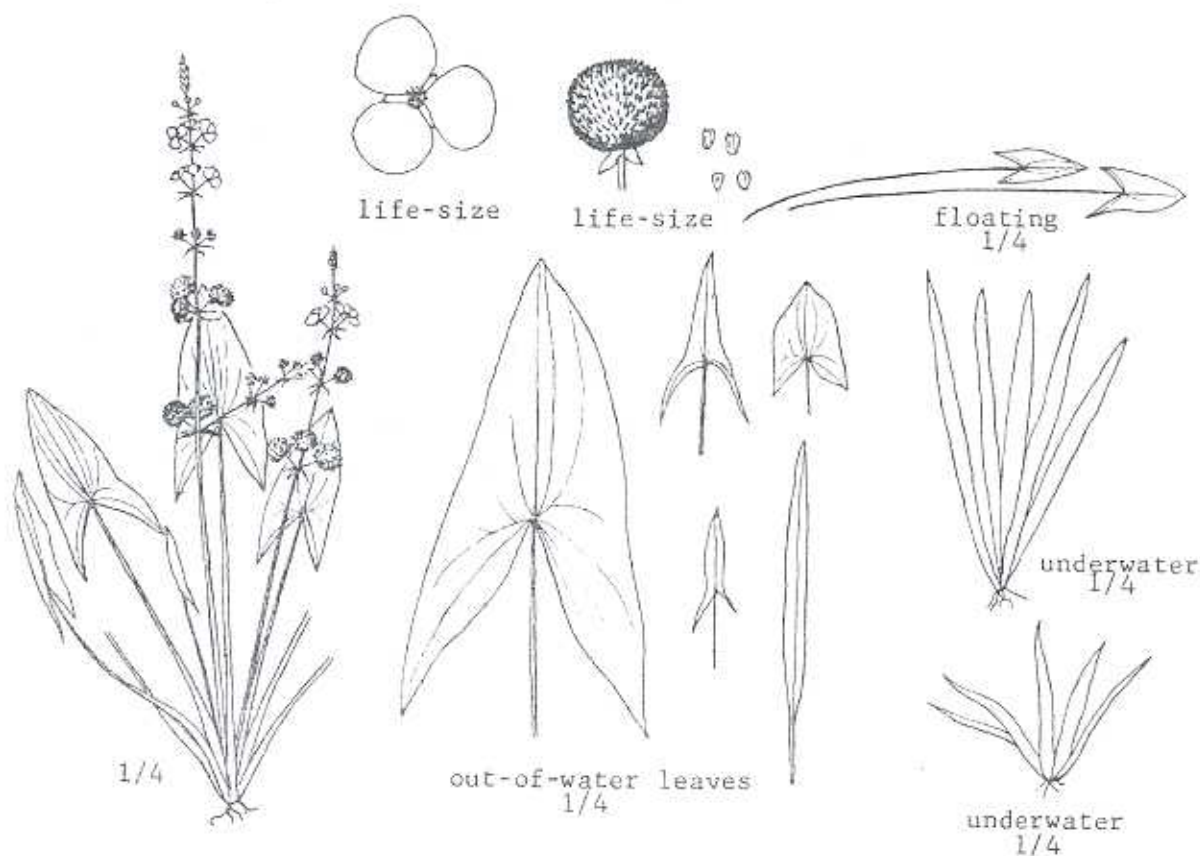


WIDGEONGRASS, *Ruppia maritima*

Salt to fresh coastal water and alkali to fresh inland water; Alaska to Newfoundland, California, and Florida (but very rare inland in the eastern half of the continent).

When not in seed, resembles non-seeding Sago Pondweed (page 72); but the leaves are usually in less-bushy clusters, the sheathing base of the leaves has a rounded, firm tip, and the root-stocks are short and zigzag and have no tubers.

Source: Hotchkiss, 1967 OBL



NORTHERN ARROWHEAD, *Sagittaria cuneata*

Inland and rarely coastal fresh marshes; Alaska to Quebec, California, Texas, and Pennsylvania.

Leaves varying greatly in size and shape, those of mature plants usually arrowhead-shaped. Leaves and flower clusters ankle-high to knee-high. Ripe seed balls look fine-prickly, because the seeds have a tiny upright point on one side of the top.

Resembles Broadleaf Arrowhead, but the ripe seed balls of that species look streaked and its seeds have a horizontal point at the top. Resembles Engelmann Arrowhead, but the ripe seed balls of that species look fine-bristly and its seeds have a prominent upright or upcurved point on one side of the top.

Source: Hotchkiss, 1970

06L

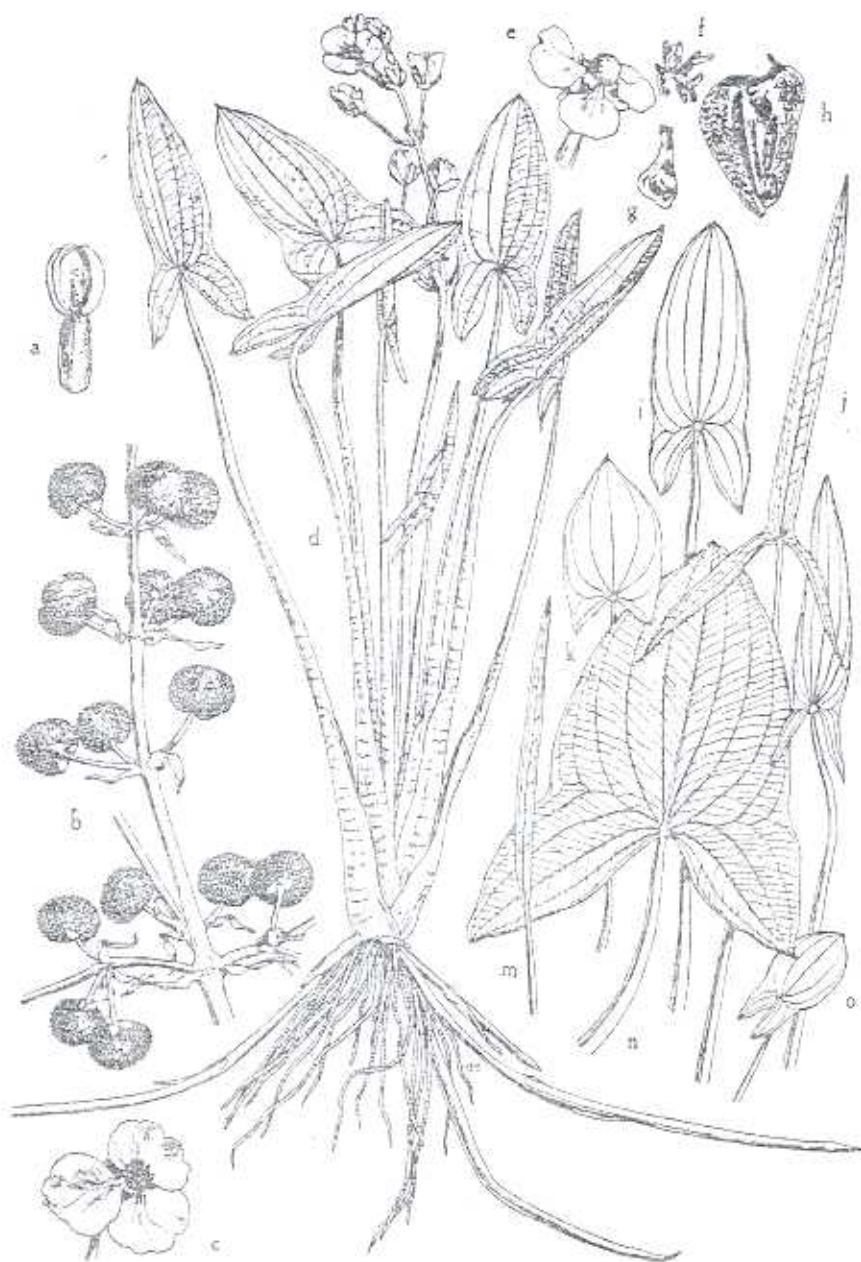
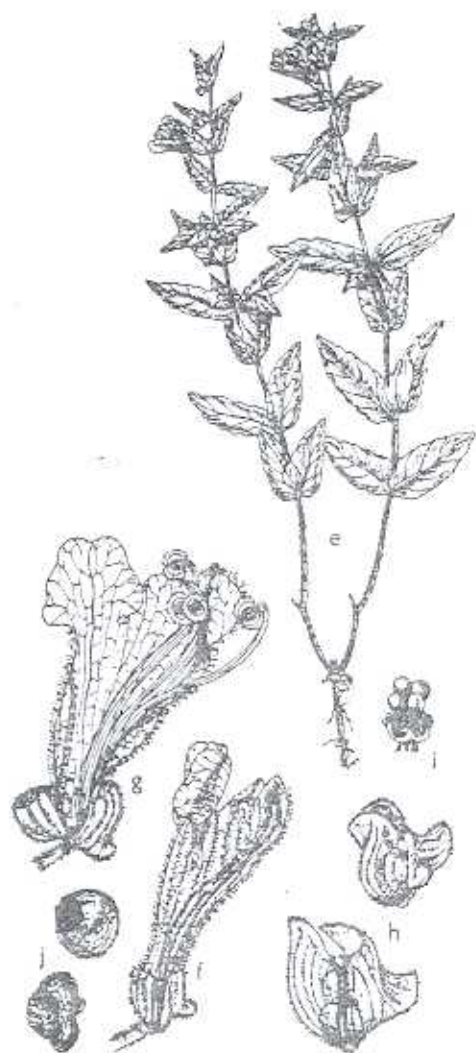


Fig. 59: *Sagittaria cuneata*: a, stamen, showing short glabrous filament, X 6; b, whorls of maturing fruits, X 25; c, staminate flower, X 15; d, habit, showing rhizomes, inflorescence and the somewhat spreading leaves, X 24; e, pistillate flower, X 15; f, papillate stigma, X 40; g, ovary terminating in stout style with papillate stigma, X 8; h, mature achene, showing wings and the erect beaklike persistent style, X 6; i-o, leaf blade variations (note that the basal lobes are generally shorter than terminal lobe), X 25. (From Mason, Fig. 50).

Source: Correll and Correll, 1972

OBL

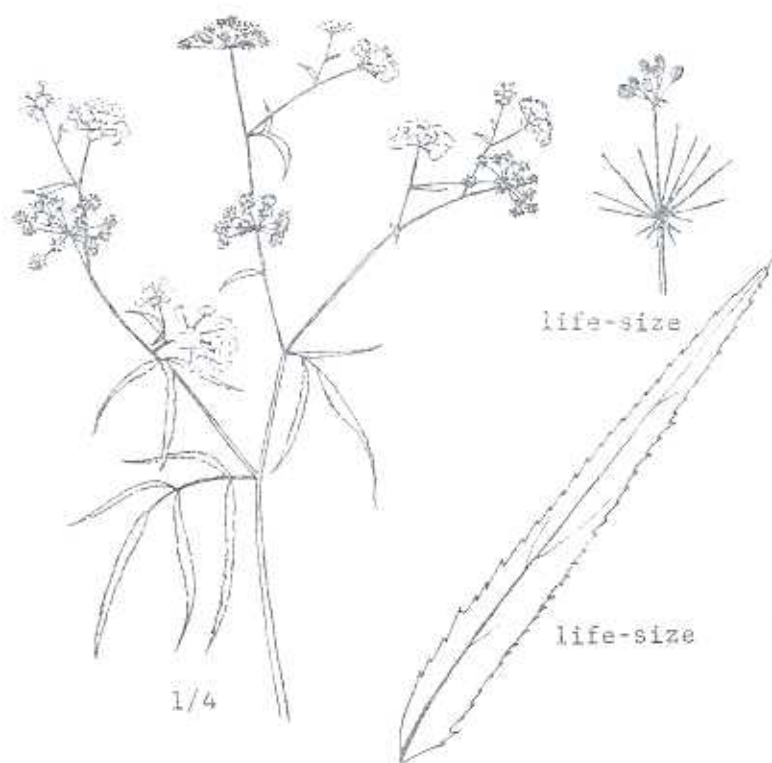


e-i. *Scutellaria galericulata*: e, habit, x $\frac{1}{2}$; f, flower, x $2\frac{1}{2}$; g, corolla and calyx split open, x $2\frac{1}{2}$; h, two calyces with mature nutlets, x $2\frac{1}{2}$; i, immature nutlets on gynophore, x $2\frac{1}{2}$; j, nutlets, x 5. (V. F.).

Marsh skullcap

Source: Correll and Correll, 1972

OBL

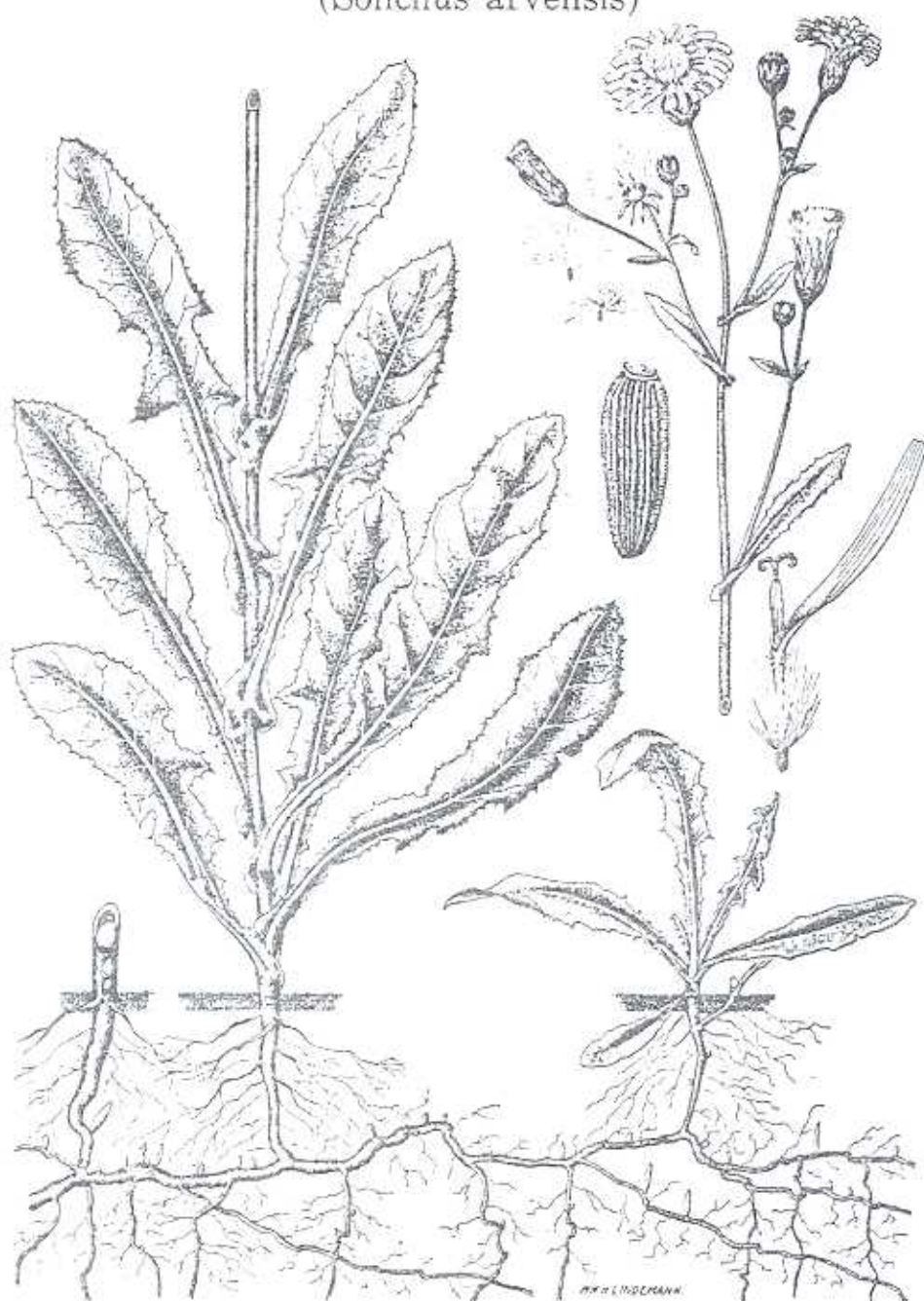


WATERPARSNIP,
Sium suave
 (*Sium cicutaefolium*
 and *floridanum*)

Inland and coastal fresh marshes; Alaska to Newfoundland and the southernmost States.

Stems knee-high to as high as a man. Leaves compound, their leaflets to 6 inches long. Flowers white and tiny, in compound umbels.

Perennial Sow Thistle
(*Sonchus arvensis*)



Source: South Dakota Weeds FAC

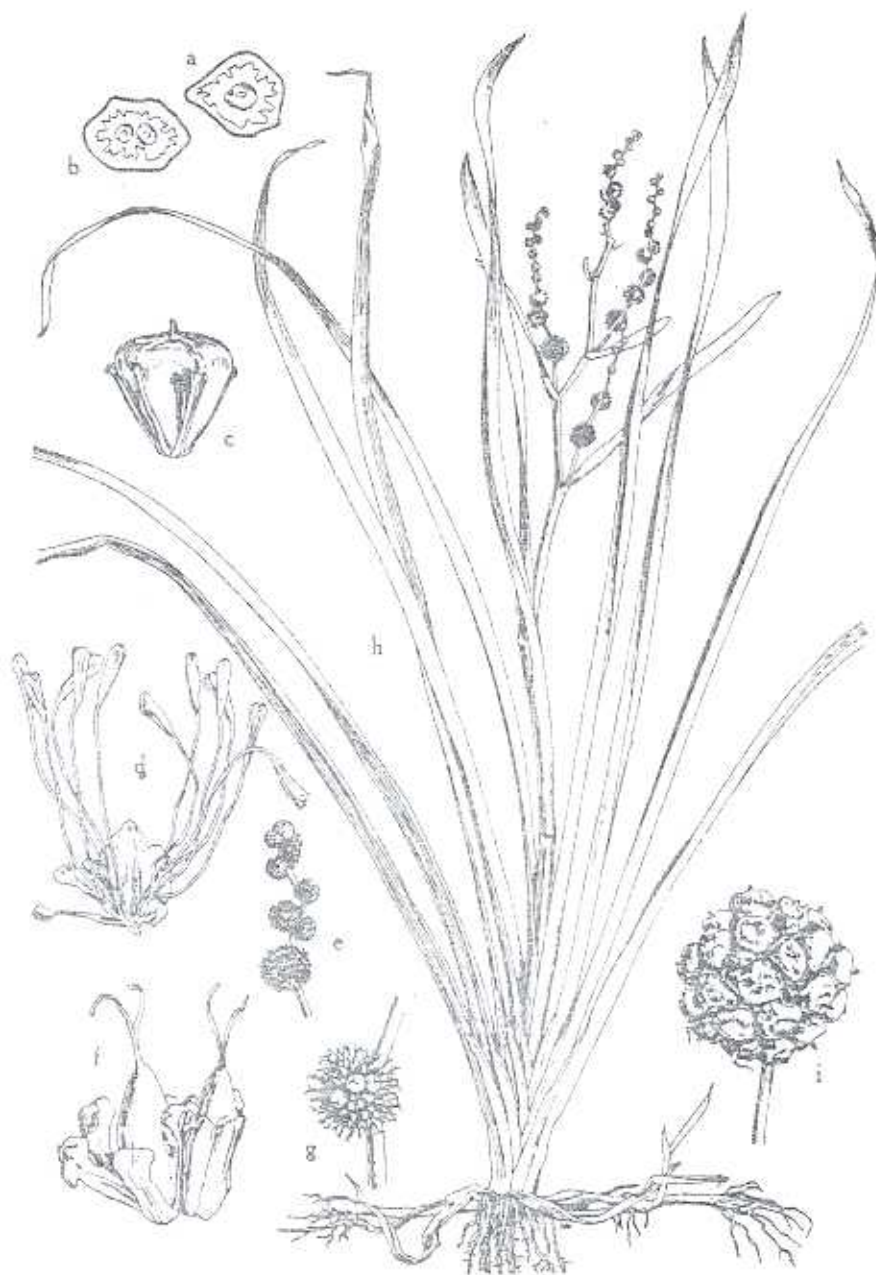


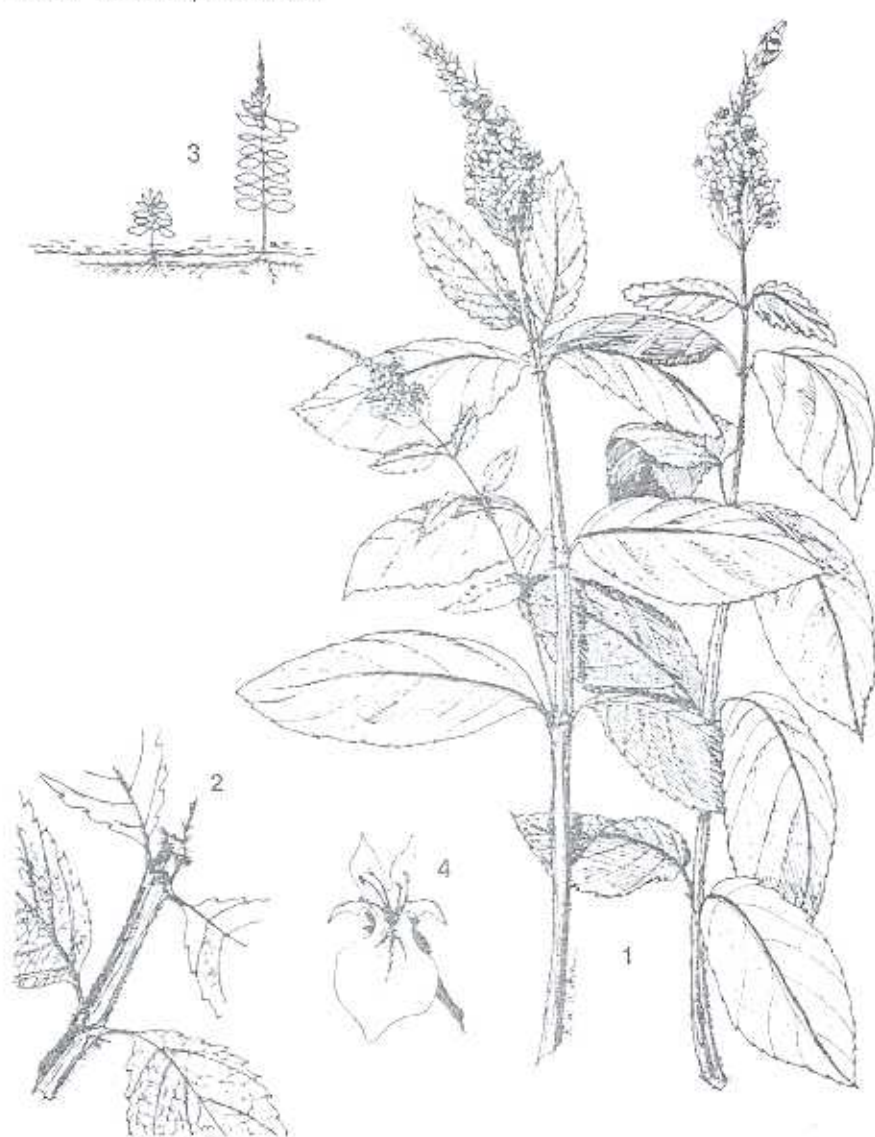
Fig. 27: *Sparganium eurycarpum*: a and b, 1-seeded and 2-seeded fruits (cross sections), X $1\frac{1}{2}$; c, mature fruit, X $1\frac{1}{2}$; d, paired staminate flowers, usually with 1 broad perianth scale and several long-clawed scales expanding into a spatulate apex, the anthers elliptic-clavate, X 6; e, staminate inflorescence showing globose heads, X $\frac{5}{8}$; f, young sessile pistillate flowers, showing the perianth scales with spatulate apex, the scales broader than those of the staminate flowers, X 4; g, young fruiting bur, showing the long 2-lobed style branches, X $\frac{2}{3}$; h, habit of plant, X $\frac{1}{4}$; i, mature fruiting head, the styles broken off, X $\frac{1}{8}$. (From Mason, Fig. 10).

Giant burreed

Source: Correll and Correll

OSL

MINT FAMILY, *Labiatae*



AMERICAN GERMANDER, *Teucrium canadense* L. 1, upper part of plant; 2, portion of stem and leaves; 3, diagram of growth habit showing underground rhizome; 4, flower. **Perennial**, reproducing from long slender rhizomes. **Stems** square, pubescent, especially on the angles, 1 to 2 feet (30 to 60 cm) tall, often branching. **Leaves** opposite, ovate, acute or acuminate at tip, rounded at base, finely toothed, pubescent, and short-petioled. **Inflorescence** spike-like, with several pink-purple, irregularly lobed flowers at each node. **Seeds** borne 4 in a nutlet, light to dark brown, surface covered with network of veins or ridges. **Found** on moist soils mostly in cultivated crops.

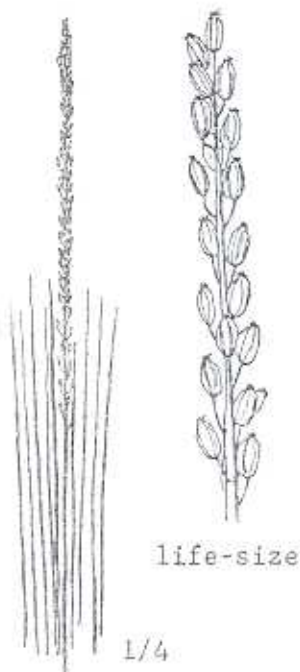
SEASIDE ARROWGRASS, *Triglochin maritimum*

Inland fresh, brackish, and alkali marshes and coastal brackish and salt marshes; Alaska to Newfoundland, California, New Mexico, Nebraska, and Delaware.

Stems ankle-high to waist-high. Leaves about as thick as the stems. Tiny greenish flowers produce a seed pods which are oval in side view and 6-sided or triangular in end view. Ripe pods split lengthwise into 6 parts, each containing one seed.

Source: Hotchkiss, 1967

OBL



Typha angustifolia L. NARROW-LEAVED CAT-TAIL.

Plant slender, to about 15 dm. tall, the stem pith white; leaves mostly less than 10, somewhat convex on back, dark-green, 3-7 mm. wide; sheaths appearing cylindrical below but actually open to base, usually conspicuously auriculate above, rarely with some sheaths tapering to the blade, the auricles scarious-margined; pistillate and staminate parts of spike usually separated by a short interval; pistillate portion of spike reddish-brown, in fruit to 15 cm. long and 15 mm. thick, its surface minutely bristly with persistent linear stigmas; staminate portion of spike to 2 dm. long; pollen grains simple; pistillate flowers with a linear fleshy stigma and usually with a hairlike bractlet with dilated blunt tips among the bristles; the denuded old axis covered with stout blunt compound papillate pedicels that are 0.5-0.7 mm. long.

Source: Correll and Correll, 1972

OBL

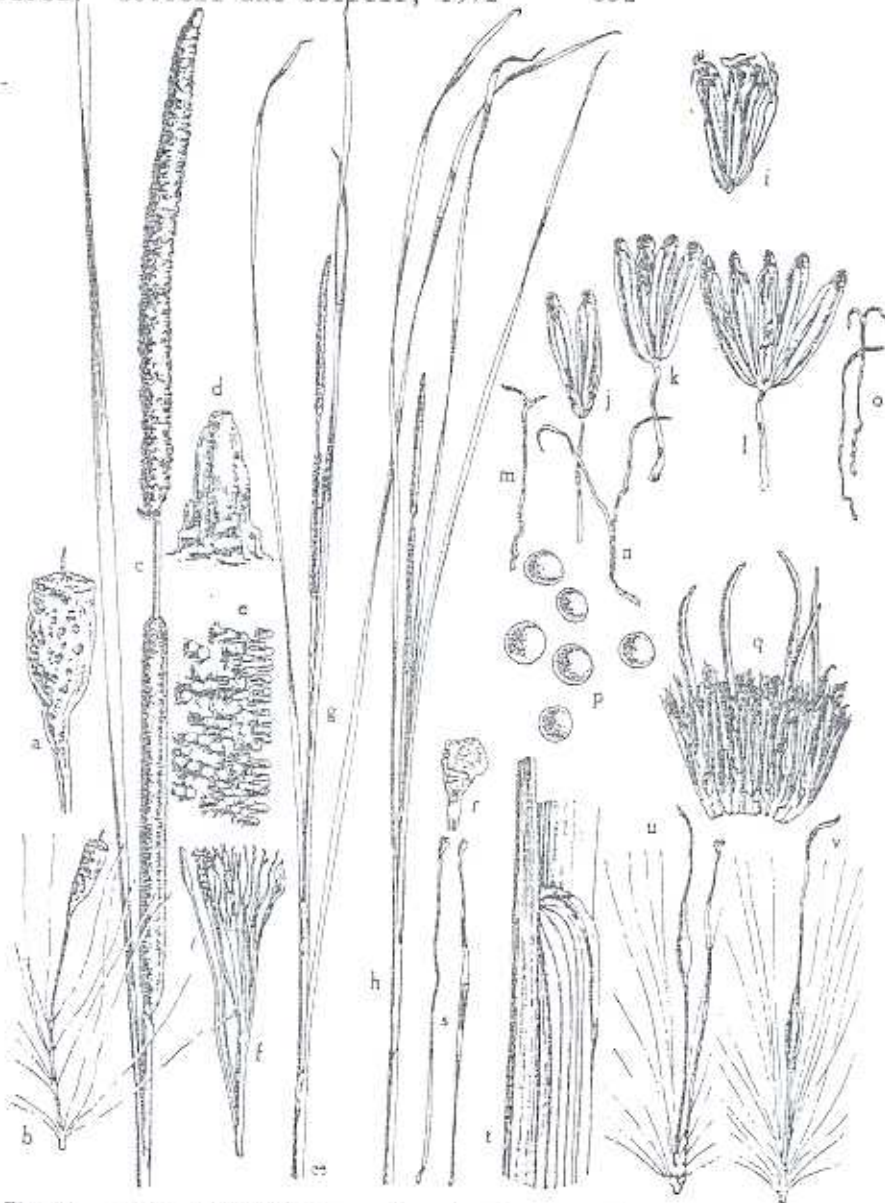


Fig. 25: *Typha angustifolia*: a, swollen aborted ovary with rudimentary style, X 20; b, sterile long-stipitate flower with terminal aborted ovary, the hairs on stipe in whorls, terminating in club-shaped or ligulate tips, X 8; c, young spike, showing area of separation between staminate spikes (above) and pistillate spikes (below), X 2; d, single compound pedicel of pistillate spike, X 40; e, group of compound pedicels, appearing smooth, X 8; f, cluster of spatulate truncate bracts, with transitional forms resembling abortive ovaries, occurring frequently among flowers, X 8; g and h, upper part of plant, showing distichous leaf arrangement and young flowering spikes, X 1/2; i, cluster of young anthers surrounded by bracts, filament not yet elongated, X 6; j-l, mature stamens, 2 to 6 anthers in a cluster sessile on a single filament, X 6; m-o, staminate bracts—linear, simple, and forked types, X 6; p, 1-celled pollen grains; q, group of young fertile and sterile pistillate flowers, the pedicels not yet elongate, X 12; r, swollen tip of pistillate bract, X 40; s, pistillate bracts, X 8; t, auricle of sheath, X 1/2; u and v, mature pistillate flowers with functional ovaries, long styles and linear stigmas, the pedicels of varying length and surrounded by basal hairs, X 8. (From Mason, Fig. 9).

***Typha latifolia* L. COMMON CAT-TAIL**

Plant coarse and stout, to about 3 m. tall; pith of the stem base white; leaves essentially flat, sheathing, pale- or grayish-green, 6-23 mm. wide, often exceeding the stem; sheaths cylindrical but open to base, the scarious upper margin tapering to blade, rarely truncate or slightly auricled; the staminate and dark-brown pistillate parts of the spike usually contiguous, the staminate portion to 12 cm. long, the pistillate portion to 2 dm. long, when in fruit 15-35 mm. thick, its surface (when magnified) appearing minutely pebbled with crowded persistent stigmas and scarcely bristly; pistillate flowers without bractlets among the bristles; stigma ovate-lanceolate, fleshy, persistent; pollen grains in fours; denuded axis of old spike retaining slender pedicels that are 1-2 mm. long.

In marshes or shallow water and along streams throughout most of our area, Mar.-May; from Nfld. to Alas., through most of the U. S. into Mex.

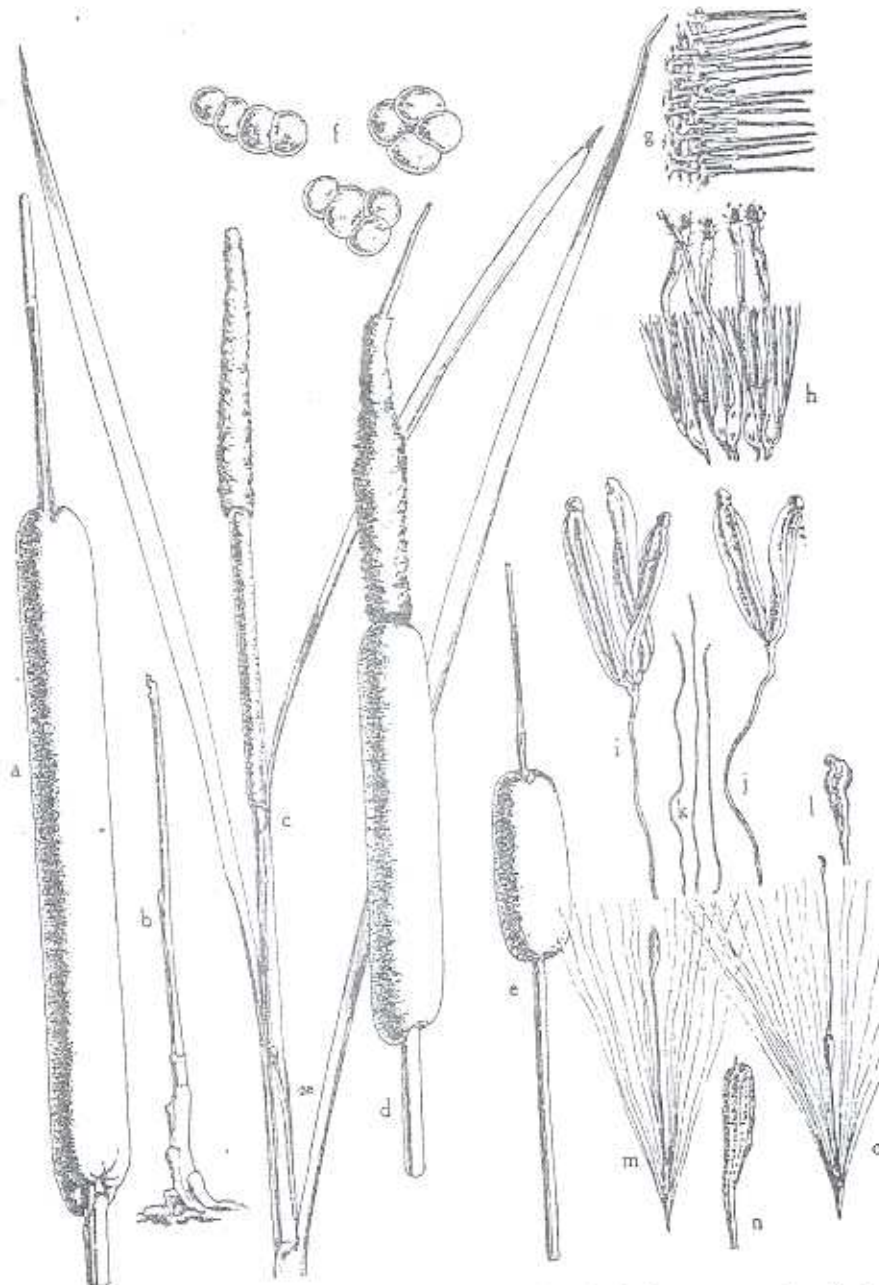
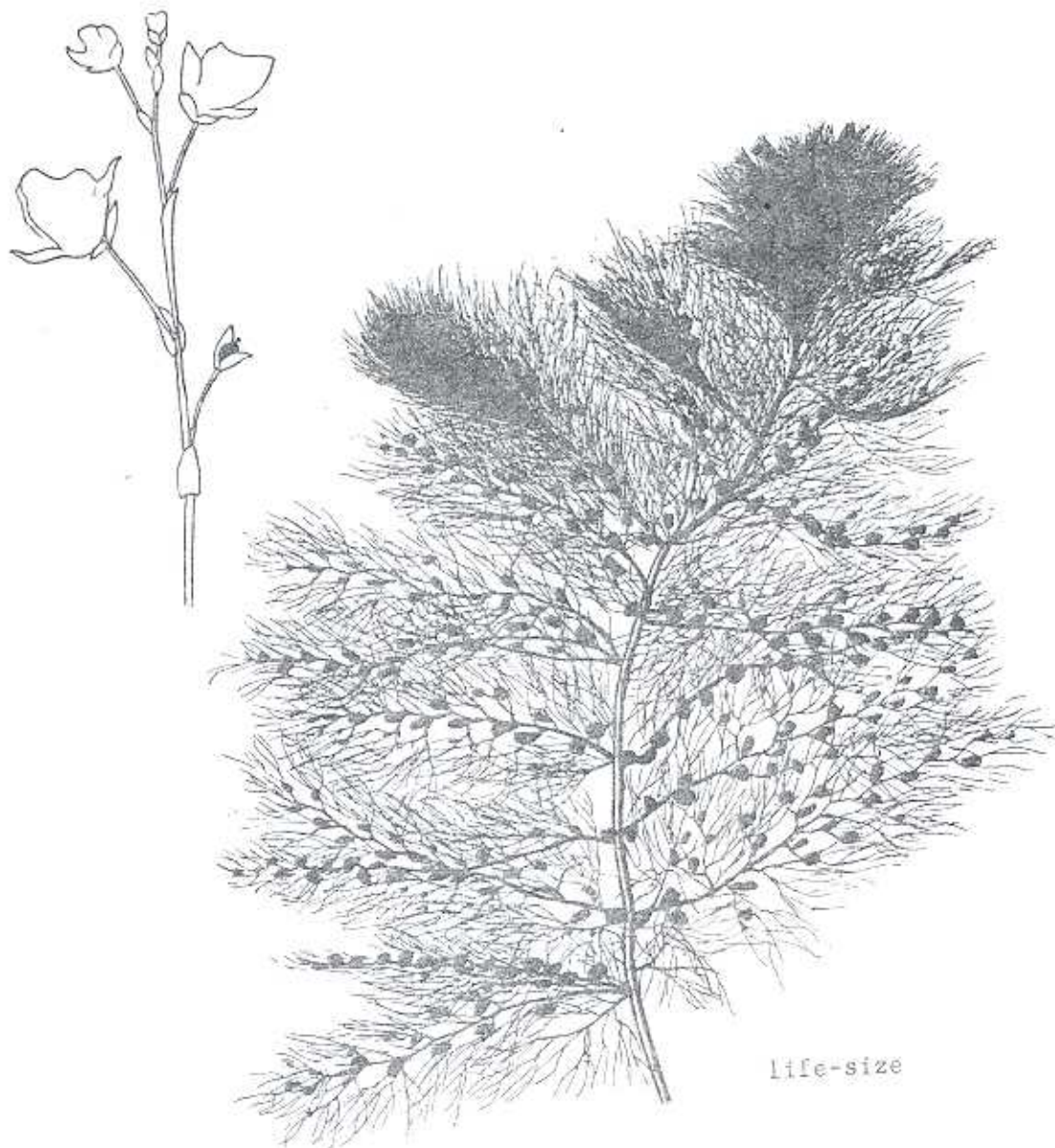


Fig. 24: *Typha latifolia*: a, pistillate spike, X $\frac{1}{2}$; b, single compound pedicel of pistillate spike, X 20; c, upper part of plant, showing distichously arranged leaves and young contiguous spike with staminate flowers (above) and pistillate flowers (below), X $\frac{1}{2}$; d, somewhat older spike, X $\frac{1}{2}$; e, variation in spike size X $\frac{1}{2}$; f, 4-celled pollen grains; g, group of compound pedicels of pistillate spike, X 4; h, young pistillate flowers, the pedicel not yet elongated, and fascicled hairlike bracts, X 12; i and j, stamens on branched filaments, X 6; k, staminate bracts, commonly white or brown-tipped, X 6; l, oblongate fleshy stigma, X 12; m, sterile pistillate flower with ellipsoid aborted ovary tipped by rudimentary style, the surrounding hairs, like those of fertile flower, originating at base, X 4; n, sterile ovary, light-brown, X 12; o, pistillate flower with mature functional ovary, X 4. (From Mason, Fig. 8).



COMMON BLADDERWORT
Utricularia macrorhiza

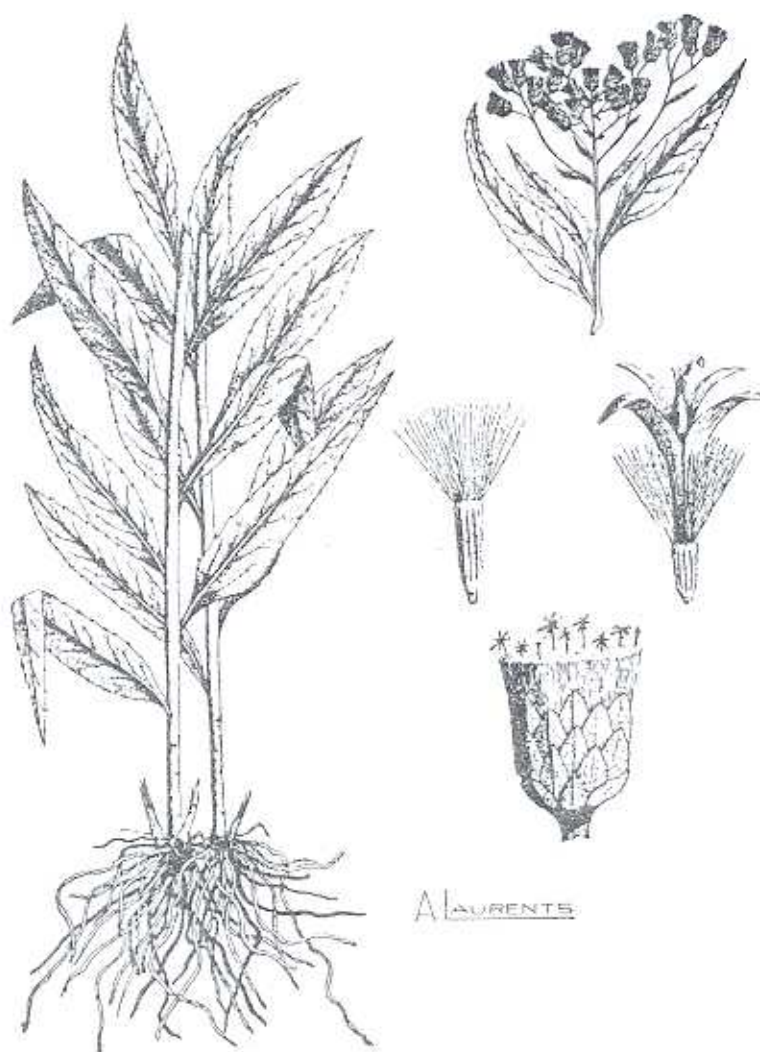
Fresh water; Alaska to Newfoundland, California, Arkansas, and North Carolina.

Flowers are yellow.

Foliage resembles that of Hidden-flower (page 46), Little Floating (page 48), and Big Floating (page 49) Bladderworts. The leaves are usually much larger and more forked than those of Hidden-flower, and they have larger bladders. The leaves have less zigzag forking and larger bladders than Little Floating. The leaves have less zigzag forking than Big Floating.

Source: Hotchkiss, 1967

OBL



A. LAURENTS

Western Ironweed

(*Veronia fasciculata*) now *Vernonia fasciculata*

OTHER NAMES — ironweed.

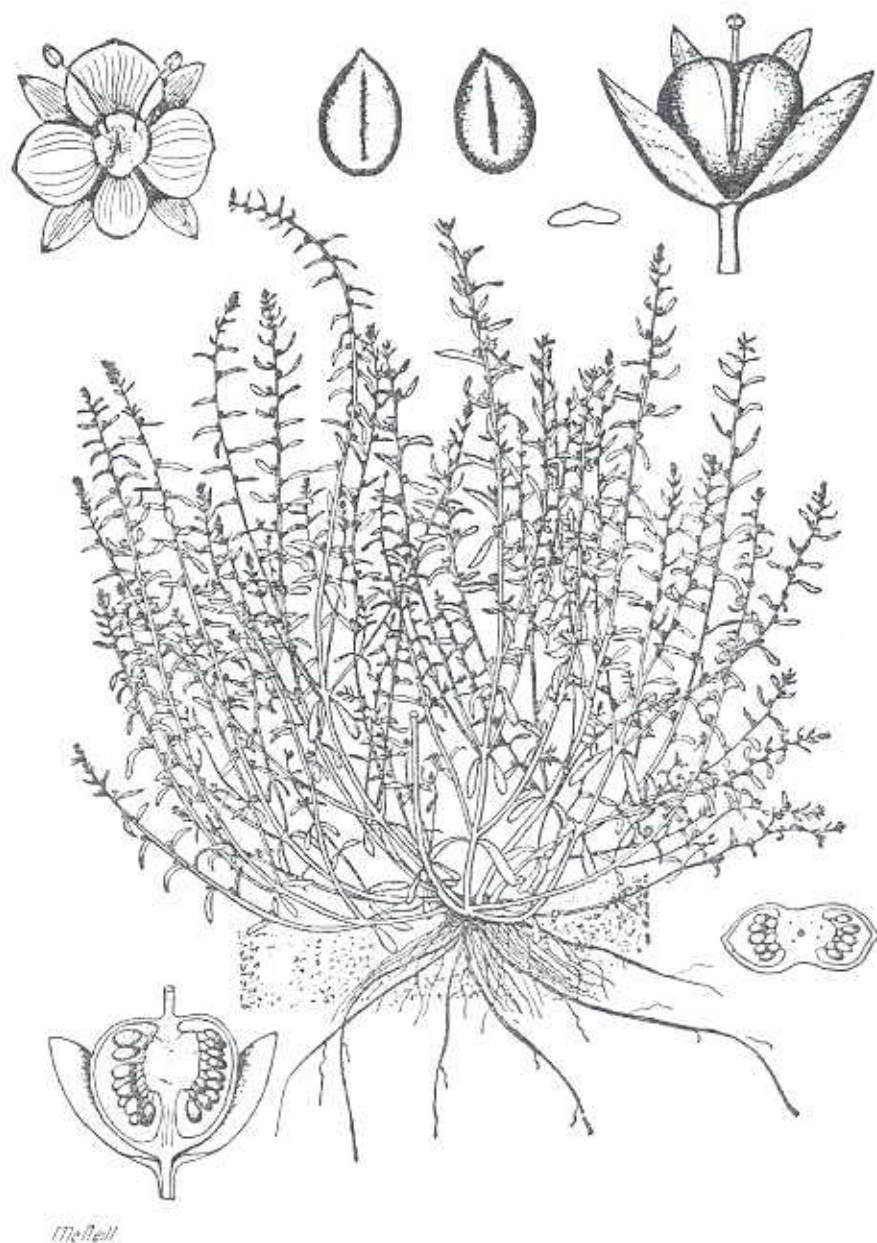
Western ironweed is a perennial, reproducing by seed. It is commonly found growing in low prairies, and pastures.

The plants grow 2 to 6 feet high in dense bunches. The stems are smooth to slightly hairy, unbranched and purple-to-green in color. Each clump of ironweed includes several stems. The

leaves are alternate, 3 to 6 inches long, have rough saw-toothed edges and a pointed tip. The flowers are purple and are arranged in a compact head on the top of the stems. There may be 20 to 30 flowers in each head. The seeds are small, have a streaked grayish-brown color; bristles on one end form a parachute.

Source: South Dakota Weeds

FACW



Purslane Speedwell

Veronica peregrina

OTHER NAMES — neckweed, speedwell.

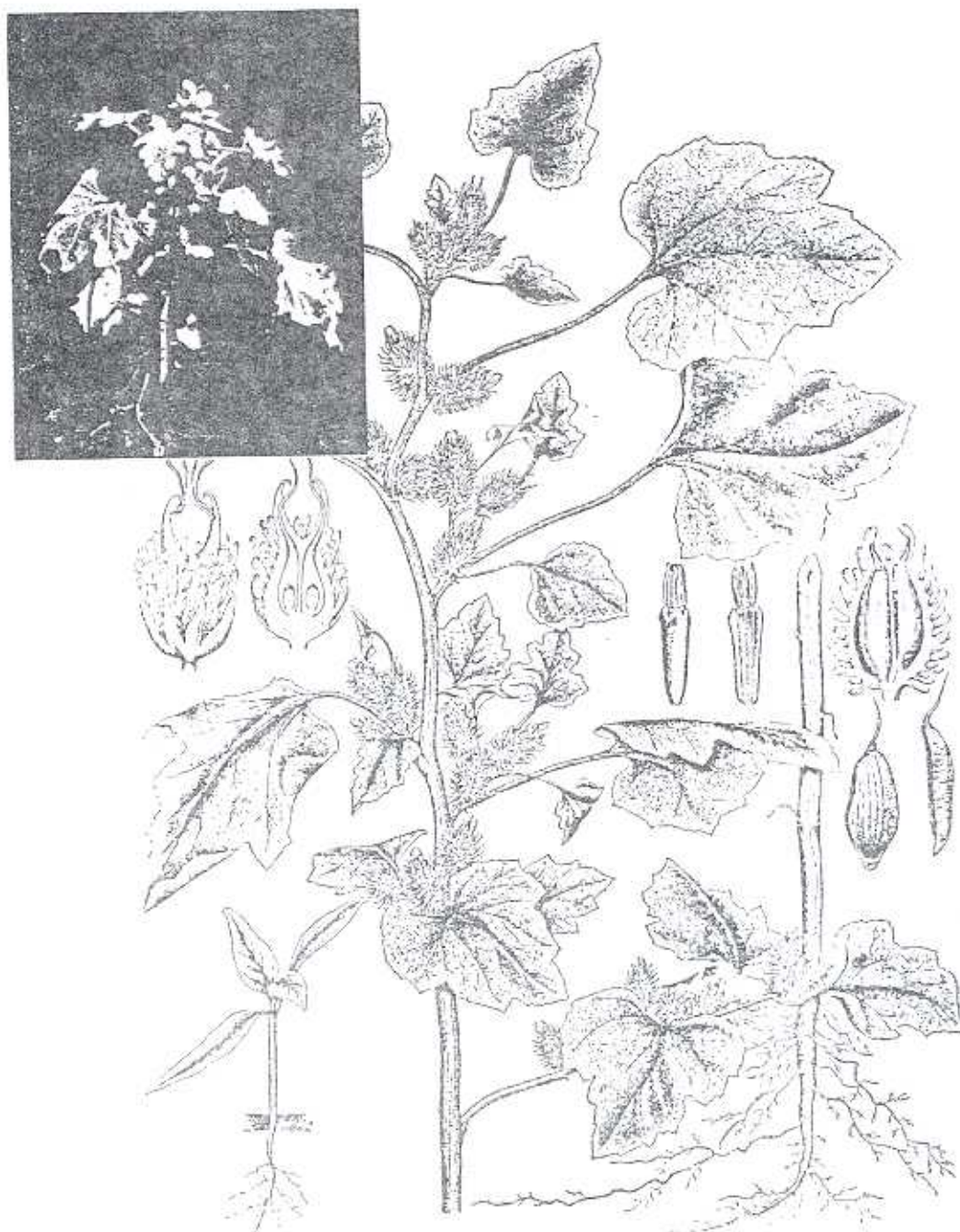
Purslane speedwell is an annual, reproducing by seed. It is found in lawns, cultivated fields, gardens and waste places.

It grows 3 to 12 inches high. Stems are smooth or slightly hairy, erect, and branched. The leaves are oblong, narrow, smooth with either toothed or smooth margins. The upper leaves are usually

alternate, while the lower ones are opposite. Flowers are small, white, and produced in the axils of the leaves. The seeds are glossy, orange-yellow, small, nearly circular, flat, and have a scar on one side and a ridge on the other. The entire plant has a rather disagreeable odor.

Source: South Dakota Weeds

NC - FACW, OBL



Common Cocklebur

Xanthium pensylvanicum or *Xanthium strumarium*

OTHER NAMES — sheep bur, clot bur, cockelbur.

Common cocklebur is an annual, reproducing by seed. It is found in pastures, cultivated fields, waste places, roadsides and ditches. The two-leaf-seedling stage is poisonous to livestock. The burs spread by clinging to animals and clothing.

It is a bushy plant that grows 1 to 4 feet high. It has a rough stem covered with distinct brown spots. The leaves have irregular margins, are

somewhat toothed and are very rough on both upper and lower surfaces. They are alternate, 1 to 3 inches wide and 2 to 5 inches long. The flowers are small, formed in clusters in the axil of the leaf. The burs are $\frac{1}{2}$ to 1 inch long, oblong, covered with hooked spines and contain 2 seeds. Both seeds usually do not germinate the same year.

Source: South Dakota Weeds

FAC, DRA

HORNED-PONDWEED
Zannichellia palustris

Fresh and alkali inland water and fresh and brackish coastal water; Alaska to Newfoundland, California, and Florida.

From spring to fall a person can usually find the seeds, which are unlike those of any other plant.

Without seeds, Horned-pondweed resembles Slender (page 75), Leafy (page 77), Snailseed (page 78), and Vasey (page 80) Pondweeds; but it has leaves in pairs at all the joints of a stem.

Source: Hotchkiss, 1967

OBL

